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Teledyne Technologies Incorporated

UNITED STATES DISTRICT COURT  
CENTRAL DISTRICT OF CALIFORNIA  
WESTERN DIVISION

TELEDYNE TECHNOLOGIES  
INCORPORATED, a Delaware  
corporation,

Plaintiff,

vs.

HONEYWELL INTERNATIONAL,  
INC., a Delaware corporation,

Defendant.

AND COUNTERCLAIM

CASE NO. CV 06-06803-MMM (SHx)

APPENDIX IN SUPPORT OF  
PLAINTIFF AND COUNTER-  
DEFENDANT TELEDYNE  
TECHNOLOGIES INCORPORATED'S  
OPENING CLAIM CONSTRUCTION  
BRIEF

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## TABLE OF CONTENTS

	<u>Page</u>
The '990 Patent .....	1
1.    "Flight data": Claims 1, 8, 14, 15, 18, 19, 25 and 33.....	1
2.    "Data acquisition unit": Claims 1, 8, 14, 15, 18, 19, 25 and 33 .....	4
3.    The "landing" elements: Claims 1, 8, 14, 18, 19, and 33 .....	6
"At least a second sensor configured to sense a landing of the aircraft": Claim 1.....	6
"Communication is initiated when at least the second sensor senses the landing of the aircraft": Claim 1 .....	8
"Initiated automatically upon landing of the aircraft": Claims 8 and 14 .....	9
"transmission of the data is initiated when the sensing means sense the landing of the aircraft" (Claim 15) .....	11
"Receiving a signal indicating a landing of the aircraft from at least a [first]/[second] sensor": Claims 18, 19, and 33 .....	12
"Cellular communications infrastructure is accessed in response to the signal": Claims 18, 19 and 33 .....	14
4.    "Cellular infrastructure"/ "cellular communications infrastructure": Claims 1, 2, 4, 8, 14, 15, 18, 19, 25 and 33 .....	17
5.    "Serial card": Claims 8 and 14.....	20
6.    "Cell channels": Claims 8 and 14 .....	22
7.    "Plurality of cell channels in communication with said serial card": Claims 8 and 14 .....	23
8.    "Thread"/"Primary data thread"/"Threads are active": Claim 25 .....	25

1	9. "Flight operations center": Claims 20, 21 and 46.....	27
2	10. The mean-plus-function terms of claim 15.....	29
3	The '152 Patent .....	31
4	1. "Data source": Claims 1 and 10.....	31
5	2. "Network system": Claims 1, 4 and 10.....	35
6	3. "Information request system": Claims 1, 4, and 10 .....	39
7	4. "Transmission unit": Claims 1, 7 and 10 .....	42
8	5. "Satellite data unit": Claims 1, 4, 5, 7, 8 and 10.....	45
9	6. "Radio frequency unit": Claims 1, 4, 7, 8 and 10 .....	48
10	7. "First communication medium": 1 and 10.....	52
11	8. "Aeronautical satellite system": Claims 1 and 10.....	55
12	9. "Second communication medium": Claims 1 and 10 .....	58
13	10. "Direct broadcast satellite": Claims 1 and 10;	
14	"Broadcasting": Claim 4 .....	61
15	11. "Selecting": Claim 6.....	65
16	12. The "Systems" ("Radio Frequency System"; "Wireless	
17	LAN System"; "Voice Channel System") of Claim 6 .....	66
18	The '468 Patent .....	68
19	1. "System Server": Claims 1, 2, 7, 9, 12, 13 and 15.....	68
20	2. "Vehicle Server": Claims 1, 2, 7, 9, 12, 13 and 15.....	70
21	3. "Data Connection": Claims 1, 2, 7, 9, 12, 13 and 15.....	72
22	4. "Component": Claims 1, 2 and 7 .....	74
23	5. "Loading," "Verifying" and "Receiving" Steps .....	76
24	6. "Digital Storage Medium": Claims 7, 13 and 15 .....	78

7. "Operable To Execute The Method": Claims 7, 13 and 15 .....79

8. "At A Pre-Determined Time": Claims 9, 12, 13 and 15 .....80

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2  
3  
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5  
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<b>The '990 Patent</b>	
<b>Term:</b>	
1. <u>"Flight data": Claims 1, 8, 14, 15, 18, 19, 25 and 33</u>	
<b>Proposed Construction:</b>	
Teledyne's construction:	Data relating to a flight or the performance of aircraft systems or components during a flight.
Honeywell's construction:	Flight parameters such as air speed, altitude, vertical acceleration, heading, and time.
<b>Claim Language:</b>	
<p>1. An aircraft data transmission system, the aircraft having a data acquisition unit, and the aircraft including a data storage medium having stored thereon <b><u>flight data</u></b> gathered in-flight by at least a first sensor on the aircraft, comprising:</p> <p style="padding-left: 40px;">a communications unit located in the aircraft and in communication with the data acquisition unit;</p> <p style="padding-left: 40px;">at least a second sensor configured to sense a landing of the aircraft;</p> <p style="padding-left: 40px;">a cellular infrastructure in communication with said communications unit after the aircraft has landed, wherein the cellular infrastructure communicates said <b><u>flight data</u></b>, and wherein the communication is initiated when at least the second sensor senses the landing of the aircraft;</p> <p style="padding-left: 40px;">a data reception unit in communication with said cellular infrastructure; and</p> <p style="padding-left: 40px;">wherein said <b><u>flight data</u></b> includes time, airspeed, altitude, vertical acceleration, and heading data relating to a flight of the aircraft.</p> <p>8. A data system for an aircraft, comprising:</p> <p style="padding-left: 40px;">a digital <b><u>flight data</u></b> acquisition unit in communication with at least one sensor;</p> <p style="padding-left: 40px;">a processor in communication with said digital <b><u>flight data</u></b> acquisition unit . . .</p> <p>14. An aircraft, comprising:</p> <p style="padding-left: 40px;">a digital <b><u>flight data</u></b> acquisition unit in communication with at least</p>	

one sensor; and

a communications unit in communication with said digital **flight data** acquisition unit, said communications unit including:

a processor in communication with said digital **flight data** acquisition unit . . .

15. An aircraft data transmission system, the aircraft having a data acquisition unit, the aircraft including a data storage medium having stored thereon **flight data** gathered in-flight by at least one sensor on the aircraft, comprising: sensing means for sensing a landing of the aircraft; means for transmitting said **flight data** from the data acquisition unit, via a cellular infrastructure after the aircraft has landed, wherein transmission of the data is initiated when the sensing means sense the landing of the aircraft;

means for receiving said **flight data** from said cellular infrastructure; and

wherein said **flight data** includes time, airspeed, altitude, vertical acceleration, and heading data relating to a flight of the aircraft.

18. A method of transmitting aircraft **flight data** from an aircraft, comprising:

receiving **flight data** from a data acquisition unit; receiving a signal indicating a landing of the aircraft from at least a first sensor;

transmitting said **flight data** via a cellular communications infrastructure after the aircraft has landed, wherein the cellular communications infrastructure is accessed in response to the signal;

receiving said transmitted **flight data**; and

wherein said **flight data** is gathered in-flight by at least a second sensor on the aircraft, and includes time, airspeed, altitude, vertical acceleration, and heading data relating to a flight of the aircraft.

19. A computer-implemented method of transmitting air-craft **flight data** from an aircraft, comprising:

receiving **flight data** from a digital **flight data** acquisition unit, wherein said **flight data** is gathered in-flight by at least a first sensor on the aircraft, and includes time, airspeed, altitude, vertical acceleration, and heading data relating to a flight of the aircraft;

receiving a signal indicating a landing of the aircraft from at least a second sensor;

processing said **flight data** to prepare said data for trans-mission; and transmitting said processed data via a cellular infrastructure after the

aircraft has landed, wherein the cellular infrastructure is accessed in response to the signal.

25. A computer-implemented method of transmitting air-craft **flight data** from an aircraft, comprising:  
 receiving **flight data** from a digital **flight data** acquisition unit;  
 processing said **flight data** to prepare said data for trans-mission; and  
 transmitting said processed data via a cellular infrastructure after the aircraft has landed, wherein processing said **flight data** includes:  
 receiving a weight-on-wheels signal;  
 initiating a data transfer;  
 compressing said **flight data** . . .

. . . . repeating, when threads are active, the steps of waiting a predetermined period of time and determining if any threads are active; and  
 exiting processing said **flight data** when no threads are active.

33. A computer readable medium having stored thereon instructions which when executed by a processor, cause the processor to perform the steps of:

receiving **flight data** from a digital **flight data** acquisition unit in an aircraft, wherein said **flight data** is gathered in-flight by at least a first sensor on the aircraft, and includes time, airspeed, altitude, vertical acceleration, and heading data relating to a flight of the aircraft;  
 receiving a signal indicating a landing of the aircraft from at least a second sensor;  
 processing said **flight data** to prepare said data for trans-mission; and  
 transmitting said processed data via a cellular infrastructure when said aircraft has landed, wherein the cellular infrastructure is accessed in response to the signal.

**Evidence:**

"It is common for aircraft to generate records of data relating to flight or performance parameters for each flight of the aircraft . . . The data are utilized . . . to assist in maintenance of the aircraft by detecting faulty components or gradual deterioration of a system or component . . ." (Ex. 1, 1:21-28).

<b>The '990 Patent</b>	
<b>Term:</b>	
2. <u>"Data acquisition unit": Claims 1, 8, 14, 15, 18, 19, 25 and 33</u>	
<b>Proposed Construction:</b>	
Teledyne's construction:	Requires no construction, but plain meaning is "a hardware device for use on an aircraft that acquires" data.
Honeywell's construction:	Aircraft component known as the flight data acquisition unit (FDAU).
<b>Claim Language:</b>	
<p>1. An aircraft data transmission system, the aircraft having a <b><u>data acquisition unit</u></b>, and the aircraft including a data storage medium having stored thereon flight data gathered in-flight by at least a first sensor on the aircraft, comprising:</p> <p style="padding-left: 40px;">a communications unit located in the aircraft and in communication with the <b><u>data acquisition unit</u></b> . . .</p> <p>8.     A data system for an aircraft, comprising:</p> <p style="padding-left: 40px;">a digital flight <b><u>data acquisition unit</u></b> in communication with at least one sensor;</p> <p style="padding-left: 40px;">a processor in communication with said digital flight <b><u>data acquisition unit</u></b> . . .</p> <p>14.    An aircraft, comprising:</p> <p style="padding-left: 40px;">a digital flight <b><u>data acquisition unit</u></b> in communication with at least one sensor; and</p> <p style="padding-left: 40px;">a communications unit in communication with said digital flight <b><u>data acquisition unit</u></b>, said communications unit including:</p> <p style="padding-left: 40px;">a processor in communication with said digital flight <b><u>data acquisition unit</u></b> . . .</p> <p>15. An aircraft data transmission system, the aircraft having a <b><u>data acquisition unit</u></b>, the aircraft including a data storage medium having stored</p>	



thereon flight data gathered in-flight by at least one sensor on the aircraft, comprising: sensing means for sensing a landing of the aircraft; means for transmitting said flight data from the **data acquisition unit**, via a cellular infrastructure after the aircraft has landed, wherein transmission of the data is initiated when the sensing means sense the landing of the aircraft . . .

18. A method of transmitting aircraft flight data from an aircraft, comprising:

receiving flight data from a **data acquisition unit**; receiving a signal indicating a landing of the aircraft from at least a first sensor . . .

19. A computer-implemented method of transmitting air-craft flight data from an aircraft, comprising:

receiving flight data from a digital flight **data acquisition unit** . .

25. A computer-implemented method of transmitting air-craft flight data from an aircraft, comprising:

receiving flight data from a digital flight **data acquisition unit**;

processing said flight data to prepare said data for trans-mission; and

transmitting said processed data via a cellular infrastructure after the aircraft has landed, wherein processing said flight data includes . . .

33. A computer readable medium having stored thereon instructions which when executed by a processor, cause the processor to perform the steps of:

receiving flight data from a digital flight **data acquisition unit** in an aircraft, wherein said flight data is gathered in-flight by at least a first sensor on the aircraft, and includes time, airspeed, altitude, vertical acceleration, and heading data relating to a flight of the aircraft . . .

#### **Evidence:**

"Aircraft data are typically gathered by a digital flight data acquisition unit (DFDAU)." (Ex. 1, 1:31-32).

**The '990 Patent****Term:**3. The "landing" elements: Claims 1, 8, 14, 18, 19, and 33

"At least a second sensor configured to sense a landing of the aircraft"

"Communication is initiated when at least the second sensor senses the landing of the aircraft"

"Initiated automatically upon landing of the aircraft"

"transmission of the data is initiated when the sensing means sense the landing of the aircraft"

"Receiving a signal indicating a landing of the aircraft from at least a [first]/[second] sensor"

"Cellular communications infrastructure is accessed in response to the signal"

**Term:**

"At least a second sensor configured to sense a landing of the aircraft": Claim 1

**Proposed Construction:**

Teledyne's construction:	At least a second sensor configured to sense information signaling the aircraft has landed.
Honeywell's construction:	At least a second sensor configured to sense a touching down of the aircraft.

**Claim Language:**

1. An aircraft data transmission system, the aircraft having a data acquisition unit, and the aircraft including a data storage medium having stored thereon flight data gathered in-flight by at least a first sensor on the aircraft, comprising:

a communications unit located in the aircraft and in communication with the data acquisition unit;

**at least a second sensor configured to sense a landing of the aircraft;**

a cellular infrastructure in communication with said communications unit after the aircraft has landed, wherein the cellular infrastructure communicates said flight data,

and wherein the communication is initiated when at least the second sensor senses the landing of the aircraft;

a data reception unit in communication with said cellular infrastructure; and

wherein said flight data includes time, airspeed, altitude, vertical acceleration, and heading data relating to a flight of the aircraft.

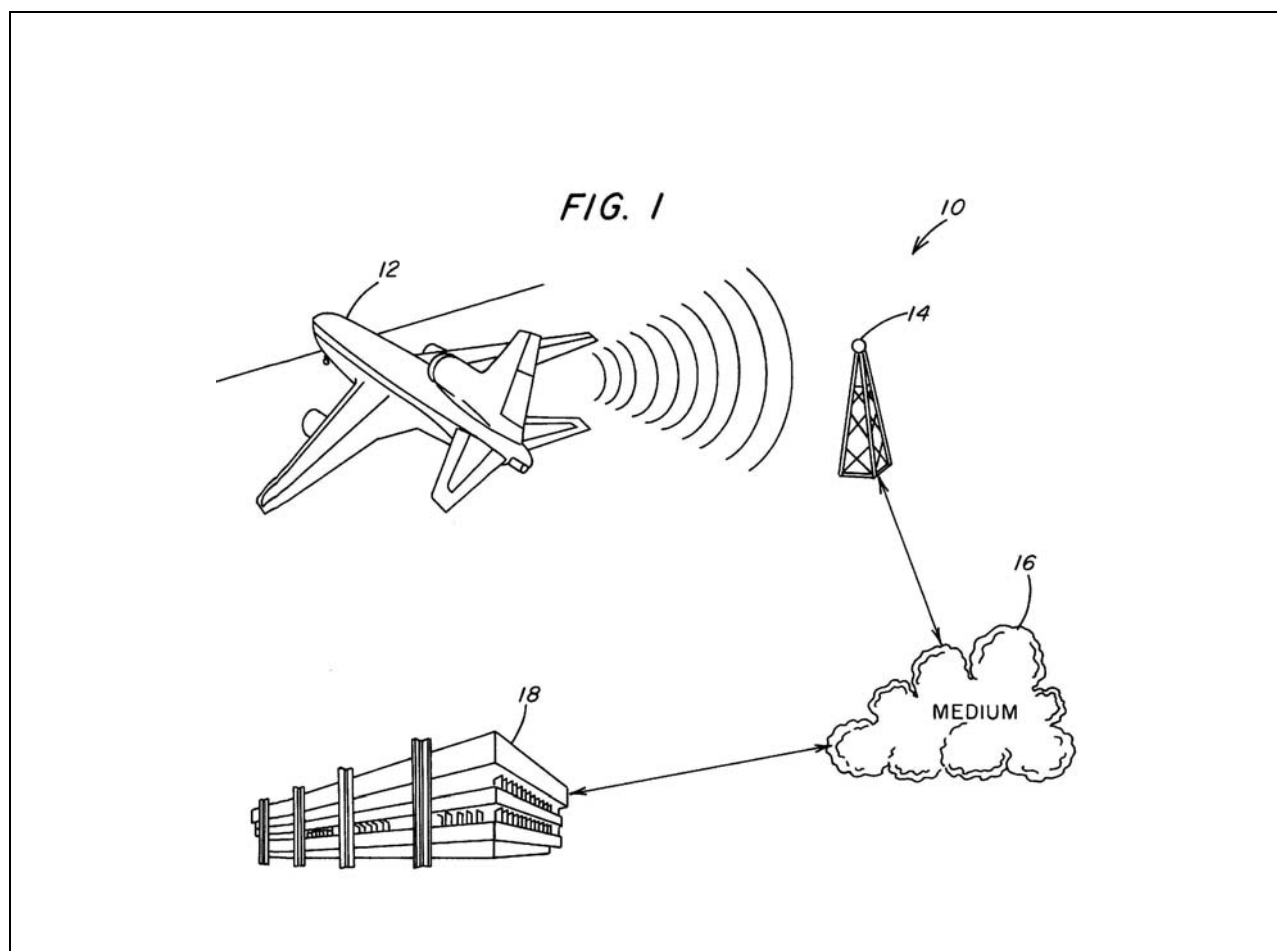
**Evidence:**

". . . the gatelink processor 32 receives a weight-on-wheels interrupt which signals that the aircraft has landed, and the data transfer is initiated." (Ex. 1, 4:58-61) (emphasis added).

"[t]he processor 32 is responsive to a weight-on-wheels signal . . . to initiate transmission or reception of the data when the aircraft 12 has landed." (Ex. 1, 3:26-30) (emphasis added).

". . . a cellular infrastructure in communication with the data communications unit after the aircraft has landed." (Ex. 1, 1:66-67, 2:1) (emphasis added).

"An aircraft 12, which has stored flight data, is illustrated after landing." (Ex. 1, 2:64-65) (emphasis added).

**Term:**

"Communication is initiated when at least the second sensor senses the landing of the aircraft": Claim 1

**Proposed Construction:**

Teledyne's construction:

Communication is initiated after at least a second sensor senses information signaling the aircraft has landed.

Honeywell's construction:

Communication is initiated at the time that at least a second sensor configured to sense a touching down of the aircraft.

**Claim Language:**

1. An aircraft data transmission system, the aircraft having a data acquisition unit, and the aircraft including a data storage medium having stored thereon flight data gathered in-flight by at least a first sensor on the aircraft, comprising:

- a communications unit located in the aircraft and in communication with the data acquisition unit;
- at least a second sensor configured to sense a landing of the aircraft;
- a cellular infrastructure in communication with said communications unit after the aircraft has landed, wherein the cellular infrastructure communicates said flight data,
- and wherein the **communication is initiated when at least the second sensor senses the landing of the aircraft**;
- a data reception unit in communication with said cellular infrastructure; and
- wherein said flight data includes time, airspeed, altitude, vertical acceleration, and heading data relating to a flight of the aircraft.

**Evidence:**

"... the gatelink processor 32 receives a weight-on-wheels interrupt which signals that the aircraft has landed, and the data transfer is initiated." (Ex. 1, 4:58-61) (emphasis added).

"[t]he processor 32 is responsive to a weight-on-wheels signal ... to initiate transmission or reception of the data when the aircraft 12 has landed." (Ex. 1, 3:26-30) (emphasis added).

"... a cellular infrastructure in communication with the data communications unit after the aircraft has landed." (Ex. 1, 1:66-67, 2:1) (emphasis added).

"An aircraft 12, which has stored flight data, is illustrated after landing." (Ex. 1, 2:64-65) (emphasis added).

**Term:**

"Initiated automatically upon landing of the aircraft": Claims 8 and 14

<b>Proposed Construction:</b>	
Teledyne's construction:	Initiated with little or no human involvement after the aircraft has landed.
Honeywell's construction:	Initiated without human intervention upon touching down of the aircraft.
<b>Claim Language:</b>	
<p>8. A data system for an aircraft, comprising:  a digital flight data acquisition unit in communication with at least one sensor;  a processor in communication with said digital flight data acquisition unit;  a serial card in communication with said processor; and  a plurality of cell channels in communication with said serial card, said cell channels for transmitting data via a cellular infrastructure after the aircraft has landed, wherein the communication between the cell channels and the serial card is <b><u>initiated automatically upon landing of the aircraft.</u></b></p> <p>14. An aircraft, comprising:  a digital flight data acquisition unit in communication with at least one sensor; and  a communications unit in communication with said digital flight data acquisition unit, said communications unit including:  a processor in communication with said digital flight data acquisition unit;  a serial card in communication with said processor; and  a plurality of cell channels in communication with said serial card, said cell channels for transmitting data via a cellular infrastructure after the aircraft has landed, wherein the communication between the cell channels and the serial card is <b><u>initiated automatically upon landing of the aircraft.</u></b></p>	
<b>Evidence:</b>	
<p>"... the gatelink processor 32 receives a weight-on-wheels interrupt which signals that <u>the aircraft has landed</u>, and the data transfer is initiated." (Ex. 1, 4:58-61) (emphasis added).</p> <p>"[t]he processor 32 is responsive to a weight-on-wheels signal . . . to initiate</p>	

transmission or reception of the data when the aircraft 12 has landed." (Ex. 1, 3:26-30) (emphasis added).

" . . . a cellular infrastructure in communication with the data communications unit after the aircraft has landed." (Ex. 1, 1:66-67, 2:1) (emphasis added).

"An aircraft 12, which has stored flight data, is illustrated after landing." (Ex. 1, 2:64-65) (emphasis added).

"said cell channels for transmitting data via a cellular infrastructure after the aircraft has landed, . . ." (Ex. 1, 7:24-25, 51-53) (emphasis added).

"When the aircraft lands, ground personnel board the aircraft, remove the media, and mail the media to a flight operations center (FOC)." (Ex. A, 1:34-36);

"The manual removal and posting of the data adds a significant labor cost, yields less than desirable data delivery reliability, and results in a significant time delay before the data are useful for analysis." (Ex. 1, 1:37-39).

"There is a need for an aircraft data transmission system that automatically transfers flight data from an aircraft to flight operation center with little or no human involvement . . ." (Ex. 1, 1:55-58) (emphasis added).

**Term:**

"transmission of the data is initiated when the sensing means sense the landing of the aircraft" (Claim 15)

**Proposed Construction:**

Teledyne's construction:	Transmission of data is initiated after a sensor senses information <u>signaling the aircraft has landed</u> .
Honeywell's construction:	Transmission of the data is initiated when the weight-on-wheels signal is generated.

**Claim Language:**

15. An aircraft data transmission system, the aircraft having a data acquisition unit, the aircraft including a data storage medium having stored thereon

flight data gathered in-flight by at least one sensor on the aircraft, comprising: sensing means for sensing a landing of the aircraft; means for transmitting said flight data from the data acquisition unit, via a cellular infrastructure after the aircraft has landed, wherein **transmission of the data is initiated when the sensing means sense the landing of the aircraft;**

means for receiving said flight data from said cellular infrastructure;  
and

wherein said flight data includes time, airspeed, altitude, vertical acceleration, and heading data relating to a flight of the aircraft.

**Evidence:**

**Term:**

"Receiving a signal indicating a landing of the aircraft from at least a [first]/[second] sensor": Claims 18, 19, and 33

**Proposed Construction:**

Teledyne's construction:	Receiving a signal indicating that the aircraft has landed from at least a [first]/[second] sensor.
Honeywell's construction:	Receiving a signal indicating a touching down of the aircraft from at least a [first]/[second] sensor.

**Claim Language:**

18. A method of transmitting aircraft flight data from an aircraft, comprising:

receiving flight data from a data acquisition unit; **receiving a signal indicating a landing of the aircraft from at least a first sensor;**

transmitting said flight data via a cellular communications infrastructure after the aircraft has landed, wherein the cellular communications infrastructure is accessed in response to the signal;

receiving said transmitted flight data; and

wherein said flight data is gathered in-flight by at least a second sensor on the aircraft, and includes time, airspeed, altitude, vertical acceleration,



and heading data relating to a flight of the aircraft.

19. A computer-implemented method of transmitting air-craft flight data from an aircraft, comprising:

receiving flight data from a digital flight data acquisition unit, wherein said flight data is gathered in-flight by at least a first sensor on the aircraft, and includes time, airspeed, altitude, vertical acceleration, and heading data relating to a flight of the aircraft;

**receiving a signal indicating a landing of the aircraft from at least a second sensor;**

processing said flight data to prepare said data for trans-mission; and transmitting said processed data via a cellular infrastructure after the aircraft has landed, wherein the cellular infrastructure is accessed in response to the signal.

33. A computer readable medium having stored thereon instructions which when executed by a processor, cause the processor to perform the steps of:

receiving flight data from a digital flight data acquisition unit in an aircraft, wherein said flight data is gathered in-flight by at least a first sensor on the aircraft, and includes time, airspeed, altitude, vertical acceleration, and heading data relating to a flight of the aircraft;

**receiving a signal indicating a landing of the aircraft from at least a second sensor;**

processing said flight data to prepare said data for trans-mission; and transmitting said processed data via a cellular infrastructure when said aircraft has landed, wherein the cellular infrastructure is accessed in response to the signal.

#### **Evidence:**

". . . the gatelink processor 32 receives a weight-on-wheels interrupt which signals that the aircraft has landed, and the data transfer is initiated." (Ex. 1, 4:58-61) (emphasis added).

"[t]he processor 32 is responsive to a weight-on-wheels signal . . . to initiate transmission or reception of the data when the aircraft 12 has landed." (Ex. 1, 3:26-30) (emphasis added).

". . . a cellular infrastructure in communication with the data communications unit

after the aircraft has landed." (Ex. 1, 1:66-67, 2:1) (emphasis added).

"An aircraft 12, which has stored flight data, is illustrated after landing." (Ex. 1, 2:64-65) (emphasis added).

"said cell channels for transmitting data via a cellular infrastructure after the aircraft has landed, . . ." (Ex. 1, 7:24-25, 51-53) (emphasis added).

**Term:**

"Cellular communications infrastructure is accessed in response to the signal": Claims 18, 19 and 33

**Proposed Construction:**

Teledyne's construction:	The cellular communications infrastructure is only accessed after receiving the signal.
Honeywell's construction:	The cellular communications infrastructure is accessed in response to the signal indicating that the aircraft is touching down.

**Claim Language:**

18. A method of transmitting aircraft flight data from an aircraft, comprising:  
 receiving flight data from a data acquisition unit; receiving a signal indicating a landing of the aircraft from at least a first sensor;  
 transmitting said flight data via a cellular communications infrastructure after the aircraft has landed, wherein the **cellular communications infrastructure is accessed in response to the signal;**  
 receiving said transmitted flight data; and  
 wherein said flight data is gathered in-flight by at least a second sensor on the aircraft, and includes time, airspeed, altitude, vertical acceleration, and heading data relating to a flight of the aircraft.

19. A computer-implemented method of transmitting air-craft flight data from an aircraft, comprising:  
 receiving flight data from a digital flight data acquisition unit, wherein

said flight data is gathered in-flight by at least a first sensor on the aircraft, and includes time, airspeed, altitude, vertical acceleration, and heading data relating to a flight of the aircraft;

receiving a signal indicating a landing of the aircraft from at least a second sensor;

processing said flight data to prepare said data for trans-mission; and transmitting said processed data via a cellular infrastructure after the aircraft has landed, wherein **the cellular infrastructure is accessed in response to the signal.**

33. A computer readable medium having stored thereon instructions which when executed by a processor, cause the processor to perform the steps of:

receiving flight data from a digital flight data acquisition unit in an aircraft, wherein said flight data is gathered in-flight by at least a first sensor on the aircraft, and includes time, airspeed, altitude, vertical acceleration, and heading data relating to a flight of the aircraft;

receiving a signal indicating a landing of the aircraft from at least a second sensor;

processing said flight data to prepare said data for trans-mission; and transmitting said processed data via a cellular infrastructure when said aircraft has landed, wherein **the cellular infrastructure is accessed in response to the signal.**

#### **Evidence:**

". . . receiving flight data from a data acquisition unit; receiving a signal indicating a landing of the aircraft from at least a first sensor . . . " (Ex. 2, 1:66-67).

". . . wherein said flight data is gathered in-flight by at least a second sensor on the aircraft . . . " (Ex. 2, 2:8-9).

". . . receiving flight data from a digital flight data acquisition unit, wherein said flight data is gathered in-flight by at least a first sensor on the aircraft. . . " (Ex. 2, 2:18-19).

". . . receiving a signal indicating a landing of the aircraft from at least a second sensor . . . " (Ex. 2, 2:18-19).

" . . . receiving flight data from a digital flight data acquisition unit in an aircraft, wherein said flight data is gathered in-flight by at least a first sensor on the aircraft . . . " (Ex. 2, 2:31-32).

" . . . receiving a signal indicating a landing of the aircraft from at least a second sensor . . . " (Ex. 2, 2:35-36).

<b>The '990 Patent</b>	
<b>Term:</b>	
4. <u>"Cellular infrastructure"/ "cellular communications infrastructure": Claims 1, 2, 4, 8, 14, 15, 18, 19, 25 and 33</u>	
<b>Proposed Construction:</b>	
Teledyne's construction:	Requires no construction, but plain meaning is "a cellular voice and/or data network that uses frequencies in the licensed frequency range."
Honeywell's construction:	A voice/data network for mobile radio communication in a licensed frequency band, organized as a system of cells including a base station transceiver subsystem connected to a base station controller.
<b>Claim Language:</b>	
<p>1. An aircraft data transmission system, the aircraft having a data acquisition unit, and the aircraft including a data storage medium having stored thereon flight data gathered in-flight by at least a first sensor on the aircraft, comprising:</p> <p style="padding-left: 40px;">a communications unit located in the aircraft and in communication with the data acquisition unit;</p> <p style="padding-left: 40px;">at least a second sensor configured to sense a landing of the aircraft;</p> <p style="padding-left: 40px;">a <b><u>cellular infrastructure</u></b> in communication with said communications unit after the aircraft has landed, wherein the <b><u>cellular infrastructure</u></b> communicates said flight data,</p> <p style="padding-left: 40px;">and wherein the communication is initiated when at least the second sensor senses the landing of the aircraft;</p> <p style="padding-left: 40px;">a data reception unit in communication with said <b><u>cellular infrastructure</u></b>; and</p> <p style="padding-left: 40px;">wherein said flight data includes time, airspeed, altitude, vertical acceleration, and heading data relating to a flight of the aircraft.</p> <p>2. The system of claim 1 wherein said data reception unit is in communication with said <b><u>cellular infrastructure</u></b> via the Internet.</p>	

4. The system of claim 1 wherein said communications unit has at least one modem in communication with said **cellular infrastructure** and said data reception unit has at least one modem in communication with said cellular infrastructure.

8. A data system for an aircraft, comprising . . .

. . . plurality of cell channels in communication with said serial card, said cell channels for transmitting data via a **cellular infrastructure** after the aircraft has landed, wherein the communication between the cell channels and the serial card is initiated automatically upon landing of the aircraft.

14. An aircraft, comprising . . .

. . . a plurality of cell channels in communication with said serial card, said cell channels for transmitting data via a **cellular infrastructure** after the aircraft has landed, wherein the communication between the cell channels and the serial card is initiated automatically upon landing of the aircraft.

15. An aircraft data transmission system, the aircraft having a data acquisition unit, the aircraft including a data storage medium having stored thereon flight data gathered in-flight by at least one sensor on the aircraft, comprising: sensing means for sensing a landing of the aircraft; means for transmitting said flight data from the data acquisition unit, via a **cellular infrastructure** after the aircraft has landed, wherein transmission of the data is initiated when the sensing means sense the landing of the aircraft;  
means for receiving said flight data from said **cellular infrastructure**;  
and . . .

18. A method of transmitting aircraft flight data from an aircraft, comprising:

receiving flight data from a data acquisition unit; receiving a signal indicating a landing of the aircraft from at least a first sensor;

transmitting said flight data via a **cellular communications infrastructure** after the aircraft has landed, wherein the **cellular communications infrastructure** is accessed in response to the signal . . .

19. A computer-implemented method of transmitting aircraft flight data from an aircraft, comprising . . .

... processing said flight data to prepare said data for trans-mission;  
and  
transmitting said processed data via a **cellular infrastructure** after  
the aircraft has landed, wherein the **cellular infrastructure** is accessed in response  
to the signal.

25. A computer-implemented method of transmitting air-craft flight  
data from an aircraft, comprising:  
receiving flight data from a digital flight data acquisition unit;  
processing said flight data to prepare said data for trans-mission; and  
transmitting said processed data via a **cellular infrastructure** after  
the aircraft has landed, wherein processing said flight data includes ...

33. A computer readable medium having stored thereon  
instructions which when executed by a processor, cause the processor to perform  
the steps of ...

... processing said flight data to prepare said data for trans-mission;  
and  
transmitting said processed data via a cellular infrastructure when said  
aircraft has landed, wherein the **cellular infrastructure** is accessed in response to  
the signal.

**Evidence:**

"It is well known in the art of cellular communication that a cellular infrastructure,  
such as a mobile telephone voice/data network, uses carrier frequencies in the  
licensed frequency range." (Ex. 3, pg. 10)

The patent specifically states that "[w]hile the present invention has been described  
in conjunction with preferred embodiments thereof, many modifications and  
variations will be apparent to those of ordinary skill in the art." (Ex. 1, 6:27-30).

<b>The '990 Patent</b>	
<b>Term:</b>	
5. <u>"Serial card": Claims 8 and 14</u>	
<b>Proposed Construction:</b>	
Teledyne's construction:	An interface for the transfer of data in a sequence of bits.
Honeywell's construction:	A circuit board with I/O interfaces that each transmit data to or from a peripheral device one bit at a time.
<b>Claim Language:</b>	
<p>8.     A data system for an aircraft, comprising . . .</p> <p>        . . . <b><u>serial card</u></b> in communication with said processor; and</p> <p>        a plurality of cell channels in communication with said <b><u>serial card</u></b>, said cell channels for transmitting data via a cellular infrastructure after the aircraft has landed, wherein the communication between the cell channels and the <b><u>serial card</u></b> is initiated automatically upon landing of the aircraft.</p> <p>14.    An aircraft, comprising . . .</p> <p>        . . . a <b><u>serial card</u></b> in communication with said processor; and</p> <p>        a plurality of cell channels in communication with said <b><u>serial card</u></b>, said cell channels for transmitting data via a cellular infrastructure after the aircraft has landed, wherein the communication between the cell channels and the <b><u>serial card</u></b> is initiated automatically upon landing of the aircraft.</p>	
<b>Evidence:</b>	
<p>"Serial": "[p]ertaining to sequential transfer, occurrence, or processing of the individual parts of a whole, such as the bits of a character, the characters of a word, etc., using the same facilities for successive parts." (Ex. 4, pg. 970).</p> <p>"While the present invention has been described in conjunction with the preferred</p>	



embodiments thereof, many modifications and variations will be apparent to those of ordinary skill in the art." (Ex. 1, 6:27-30).

". . . the processor 32 prepares the flight data for transmission and transmits the date to a multi-port serial card 34." (Ex. 1, 3:31-33).

<b>The '990 Patent</b>	
<b>Term:</b>	
6. <u>"Cell channels": Claims 8 and 14</u>	
<b>Proposed Construction:</b>	
Teledyne's construction:	Communication paths in a cellular medium.
Honeywell's construction:	Physical, over-the-air channels to the cellular infrastructure that can transmit simultaneously and can thus transmit data in parallel.
<b>Claim Language:</b>	
<p>8.     A data system for an aircraft, comprising . . .</p> <p>. . . a plurality of <b><u>cell channels</u></b> in communication with said serial card, said <b><u>cell channels</u></b> for transmitting data via a cellular infrastructure after the aircraft has landed, wherein the communication between the <b><u>cell channels</u></b> and the serial card is initiated automatically upon landing of the aircraft.</p> <p>14.    An aircraft, comprising . . .</p> <p>. . . a plurality of <b><u>cell channels</u></b> in communication with said serial card, said <b><u>cell channels</u></b> for transmitting data via a cellular infrastructure after the aircraft has landed, wherein the communication between the <b><u>cell channels</u></b> and the serial card is initiated automatically upon landing of the aircraft.</p>	
<b>Evidence:</b>	
<p>"The cellular modem 43 . . . transfers the data packets <u>over preexisting cellular channels</u> to a router 45 in the reporting system . . . The cellular network utilizes <u>channel-hopping</u> to transmit the data packets during idle time between cellular voice calls, . . ." U.S. Patent. No. 5,550,738 (Bailey, <i>et al.</i>, Aug. 19, 1994) (Ex. 5, 4:17-22) (emphasis added).</p> <p>"Channel": a "path along which signals can be sent, for example, a data channel, output channel." (Ex. 4, pg. 146).</p>	

<b>The '990 Patent</b>	
<b>Term:</b>	
7. <u>"Plurality of cell channels in communication with said serial card": Claims 8 and 14</u>	
<b>Proposed Construction:</b>	
Teledyne's construction:	Requires no construction, but plain meaning is "more than one communication path in a cellular medium able to send information to or receive information from said serial card."
Honeywell's construction:	More than one physical, over-the-air channels to the cellular infrastructure are each attached to an I/O port of said serial card, allowing the cell channels to transmit data simultaneously and in parallel.
<b>Claim Language:</b>	
<p>8. A data system for an aircraft, comprising:  a digital flight data acquisition unit in communication with at least one sensor;  a processor in communication with said digital flight data acquisition unit;  a serial card in communication with said processor; and  <u><b>a plurality of cell channels in communication with said serial card</b></u>, said cell channels for transmitting data via a cellular infrastructure after the aircraft has landed, wherein the communication between the cell channels and the serial card is initiated automatically upon landing of the aircraft.</p> <p>14. An aircraft, comprising:  a digital flight data acquisition unit in communication with at least one sensor; and  a communications unit in communication with said digital flight data acquisition unit, said communications unit including:  a processor in communication with said digital flight data acquisition unit;</p>	

a serial card in communication with said processor; and  
**a plurality of cell channels in communication with said serial card**, said cell channels for transmitting data via a cellular infrastructure after the aircraft has landed, wherein the communication between the cell channels and the serial card is initiated automatically upon landing of the aircraft.

**Evidence:**

"[e]ach I/O port of the card is attached to a cell channel . . ." (Ex. 1, 3:33-34)

"While the present invention has been described in conjunction with preferred embodiments thereof, many modifications and variations will be apparent to those of ordinary skill in the art." (Ex. 1, 6:27-30).

<b>The '990 Patent</b>	
<b>Term:</b>	
8. <u>"Thread"/"Primary data thread"/"Threads are active": Claim 25</u>	
<b>Proposed Construction:</b>	
<b>Thread</b>	<b>Teledyne's construction:</b> part of a computer program that runs independently or along with other threads to accomplish a task.
	<b>Honeywell's construction:</b> a single sequential flow of control within a process for conveying data packets to the multi-port serial card for transmission via one of a fixed number of corresponding cell channels.
<b>Primary data thread:</b>	<b>Teledyne's construction:</b> a thread that causes the initial call to be made to the cellular infrastructure.
	<b>Honeywell's construction:</b> a data thread that causes the initial call to be made via the cellular infrastructure to open the communications channel.
<b>Threads are active:</b>	<b>Teledyne's construction:</b> if there are any data packets that have not been transmitted or have been transmitted and dropped.
	<b>Honeywell's construction:</b> more than one data thread is active.
<b>Claim Language:</b>	
<p>25.     A computer-implemented method of transmitting air-craft flight data from an aircraft, comprising:</p> <p>receiving flight data from a digital flight data acquisition unit;</p> <p>processing said flight data to prepare said data for trans-mission; and</p> <p>transmitting said processed data via a cellular infrastructure after the aircraft has landed, wherein processing said flight data includes:</p> <p>receiving a weight-on-wheels signal;</p> <p>initiating a data transfer;</p> <p>compressing said flight data;</p> <p>encrypting said compressed data;</p> <p>creating a packet queue;</p>	

starting a **primary data thread**;  
 waiting a predetermined period of time;  
 determining if any **threads are active**;  
 repeating, when **threads are active**, the steps of waiting a  
 predetermined period of time and determining if any **threads are active**; and  
 exiting processing said flight data when no **threads are active**.

**Evidence:**

"The network layer 62 then routes the packets to one of up to 16 peer-to-peer protocol (PPP) threads running within the operating system 60 at a data link layer interface 64." (Ex. 1, 4:26-29).

"The primary data thread is started to make the initial call and open the communications channel to the flight operations center 18." (Ex. 1, 4:67, 5:1).

". . . the processor determines if any threads are active, i.e., if there are any packets that haven't been transmitted or have been transmitted and dropped." (Ex. 1, 5:4-6).

"Thread (4) A single sequential flow of control within a process" (Ex. 4, pg. 1108).

<b>The '990 Patent</b>	
<b>Term:</b>	
9. <u>"Flight operations center": Claims 20, 21 and 46</u>	
<b>Proposed Construction:</b>	
Teledyne's construction:	requires no construction, but plain meaning is "a location housing and/or in communication with a data reception unit."
Honeywell's construction:	base of operations for the airline or other aircraft operator.
<b>Claim Language:</b>	
<p>20.     The method of claim 19 further comprising receiving said transmitted data at a <b><u>flight operations center</u></b>.</p> <p>21.     The method of claim 20 further comprising receiving said transmitted data and transmitting said received data via the Internet before receiving said transmitted data at a <b><u>flight operations center</u></b>.</p> <p>46.     The method of claim 45 further comprising receiving said transmitted data at a <b><u>flight operations center</u></b>.</p>	
<b>Evidence:</b>	
Figures 2 and 11 of the '990 patent: (continued on next page)	

FIG. 2

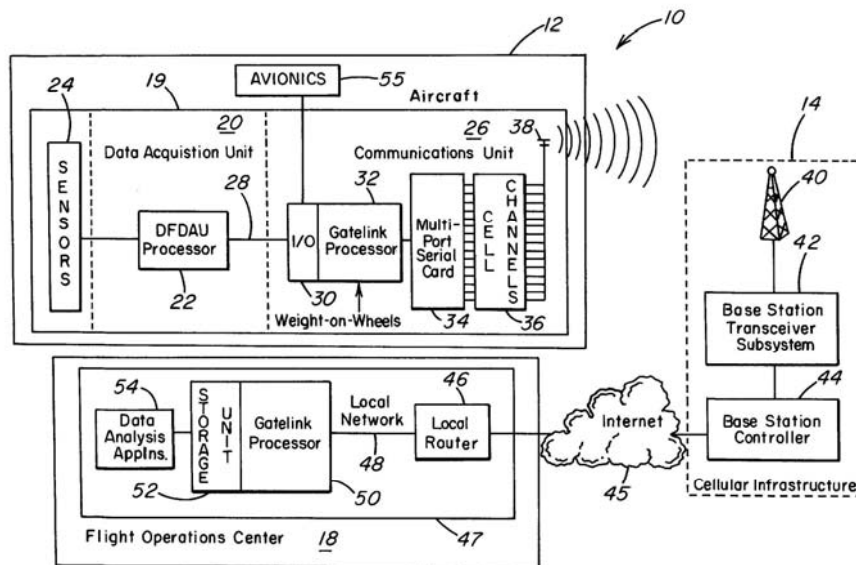
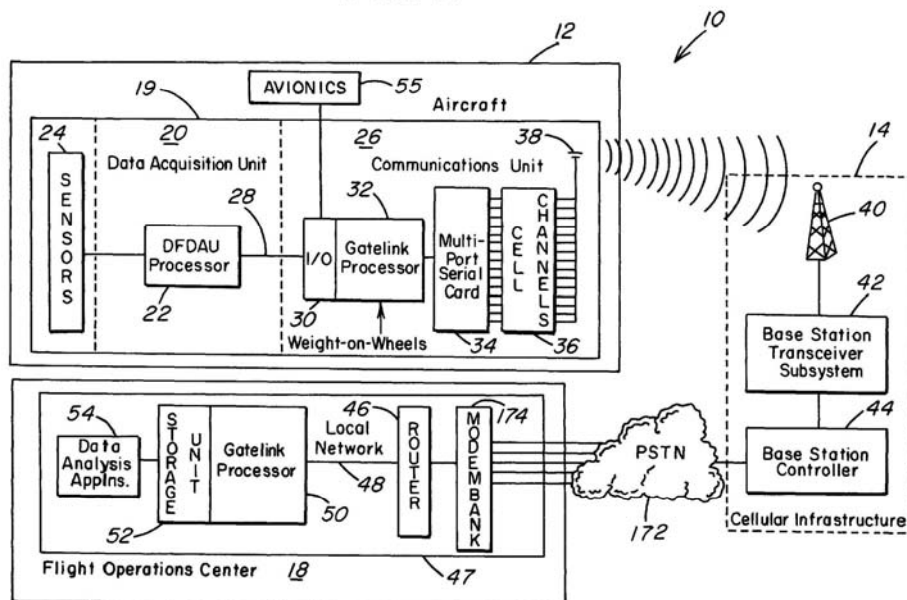


FIG. 11





<b>The '990 Patent</b>	
<b>Term:</b>	
10. <u>The mean-plus-function terms of claim 15</u>	
<b>Proposed Construction:</b>	
"sensing means"	<b>Teledyne's proposed structure:</b> a sensor capable of sending, or causing to be sent, an electrical signal, and all equivalents thereof.
	<b>Honeywell's proposed structure:</b> the weight-on-wheels signal from the landing gear of the aircraft.
"means for transmitting"	<b>Teledyne's proposed structure:</b> a communications unit, including a computer processor, serial card, cell channel and antenna, and all equivalents thereof.
	<b>Honeywell's proposed structure:</b> Each I/O port of a multiport serial card is attached to a cell channel which can open, sustain, and close a physical, over-the-air channel to the cellular infrastructure. The cell channels can transmit simultaneously and can thus transmit data in parallel. The flight data is segmented into datagrams and UDP/IP packets, which are transmitted as a fixed number of threads corresponding to the number of cell channels.
"means for receiving"	<b>Teledyne's proposed structure:</b> a data reception unit, including a router, local network, computer processor, and storage unit, and all equivalents thereof.
	<b>Honeywell's proposed structure:</b> a flight operations center processor running software that performs the operations detailed in the '990 patent at col. 4 ll. 32-53 and col. 5 l. 41 through col. 6 l. 26.
<b>Claim Language:</b>	
<b>Evidence:</b>	
"The processor is responsive to a weight-on-wheels signal, which acts as an	

interrupt signal to signal the processor 32 to initiate transmission or reception of the data when the aircraft 12 has landed." (Ex. 1, 3:26-30).

"The system also includes a cellular infrastructure in communication with the data communications unit after the aircraft has landed." (Ex. 1, 1:66-67, 2:1).

"A local router 46 in a data reception unit 47 of the flight operations center 18 is connected to the Internet 45 . . . The router 46 connects a local area network 48 to the Internet 45. . . . A gatelink processor 50 is connected to the network 48 and receives the flight data for storage in an attached storage unit 52." (Ex. 1, 3:52-60).

Figures 2 and 11 of the '990 patent:

FIG. 2

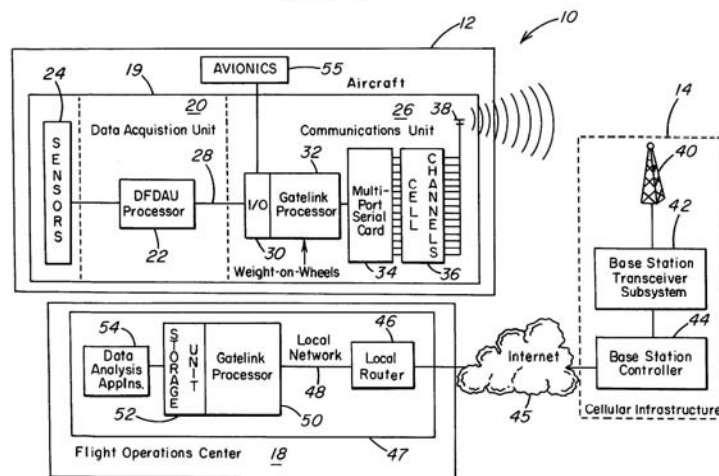
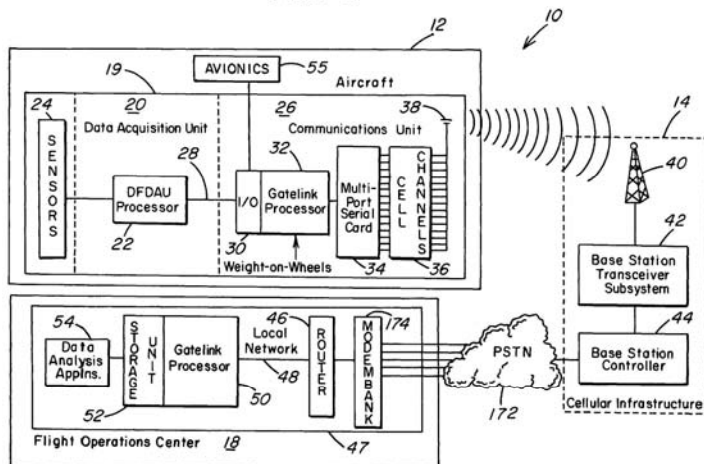


FIG. 11



<b>The '152 Patent</b>	
<b>Term:</b>	
1. <u>"Data source": Claims 1 and 10</u>	
<b>Proposed Construction:</b>	
Teledyne's construction:	a source of data remote from the vehicle, which stores or channels information, receives requests for information from the information request system and transmits the requested data to the receiver.
Honeywell's construction:	a source of data
<b>Claim Language:</b>	
<p>1. A data communications system for retrieving data information, said data communications system comprising:</p> <p>    a <b><u>data source</u></b> comprising a network system for the storage and delivery of the data information;</p> <p>        an information request system comprising a transmission unit coupled to said <b><u>data source</u></b> and adapted to request the data information from said <b><u>data source</u></b> wherein said transmission unit comprises a satellite data unit and a radio frequency unit;</p> <p>        a first communication medium configured for transmission of requests for the data information from the information request system to said <b><u>data source</u></b>, said first communication medium comprising . . .</p> <p>        . . . a second communication medium comprising a direct broadcast satellite adapted to receive data information from said <b><u>data source</u></b> and to broadcast said data information to said receiver;</p> <p>        a receiver coupled to said <b><u>data source</u></b> by said second communication medium and adapted to receive the data information requested by said information request system from said <b><u>data source</u></b>; . . .</p> <p>10. A data communications system for retrieving data information, said data communications system comprising:</p> <p>    a <b><u>data source</u></b> comprising a network system for the storage and delivery of the data information;</p>	

an information request system comprising a transmission unit coupled to said **data source** and adapted to request the data information from said **data source**, wherein said transmission unit comprises a satellite data unit, a radio frequency unit, and a wireless LAN unit. . .

. . . a LAN ground station adapted to receive information request signals from said wireless LAN unit, wherein said LAN ground station is adapted to transmit data information requests from said wireless LAN unit to said network system, and said network system is adapted to transfer information requests signals to said **data source**;

a second communication medium comprising a direct broadcast satellite adapted to receive data information from said **data source** and to broadcast said data information to said receiver;

a receiver coupled to said **data source** by said second communication medium and adapted to receive the data information requested by said information request system from said **data source** . . .

#### **Evidence:**

"Data source 104 stores or channels information, . . . receives requests for information from the information request system 102, and transmits the requested data to the receiver 106." (Ex. 6, 2:59-64).

"The present invention relates to . . . systems for requesting and receiving data from a remote data source." (Ex. 6, 1:6-8).

"The information request system 102 and the receiver 106 are remote from the data source 104." (Ex. 6, 2:52-54) (emphasis added).

Figures 1 -5 of the '152 Patent:

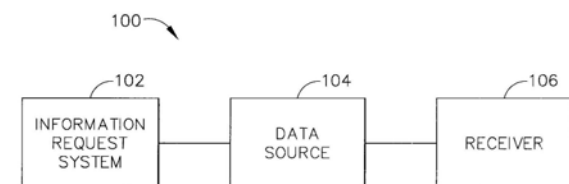


FIG. 1

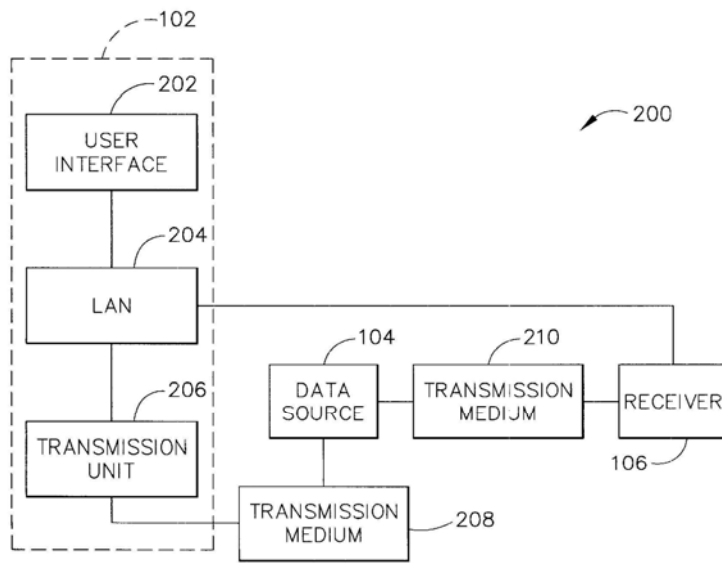


FIG. 2

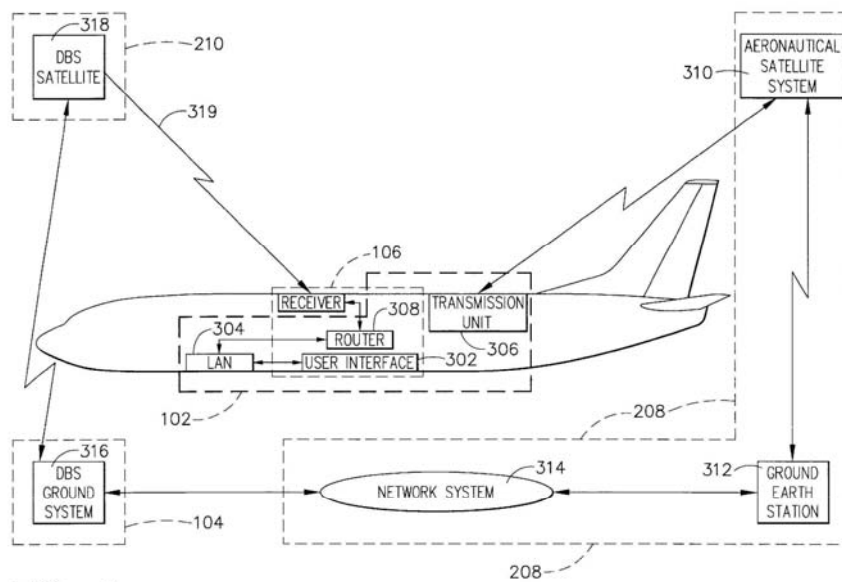


FIG. 3

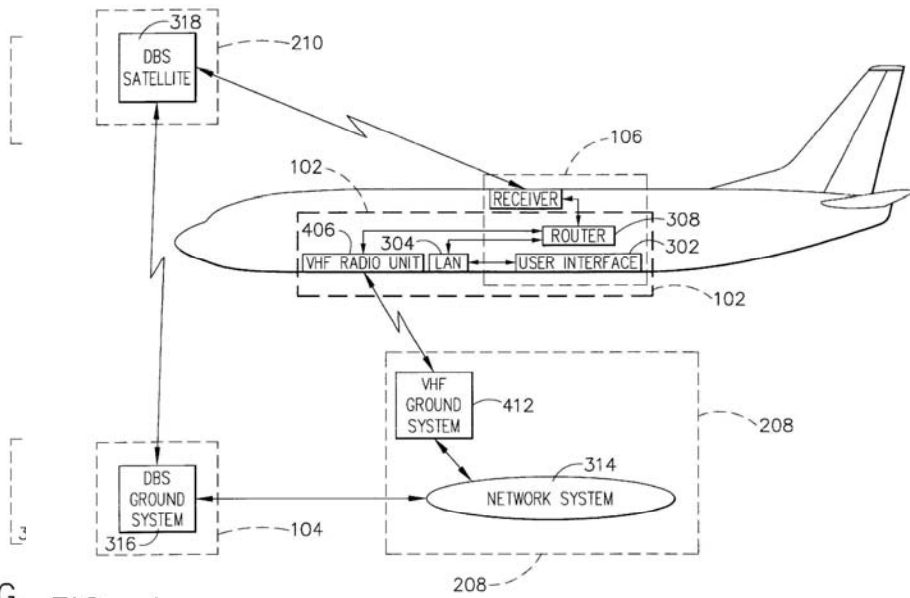


FIG. FIG. 4

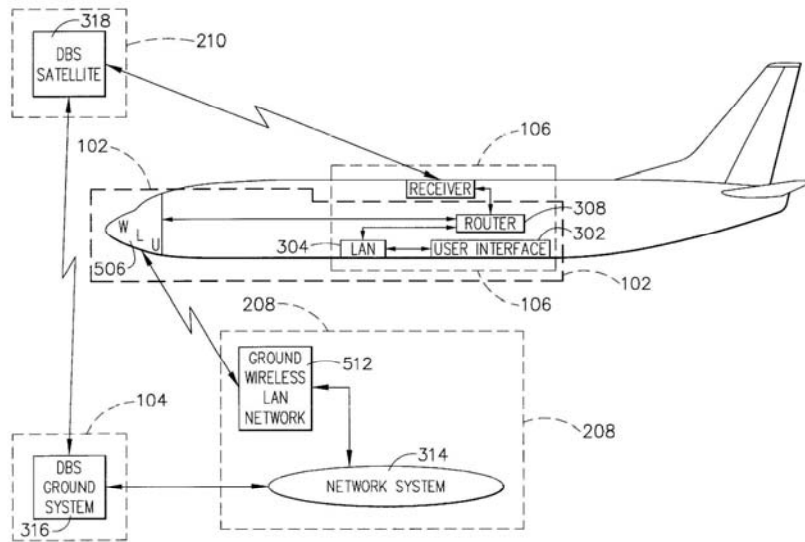


FIG. 5

<b>The '152 Patent</b>	
<b>Term:</b>	
2. <u>"Network system": Claims 1, 4 and 10</u>	
<b>Proposed Construction:</b>	
Teledyne's construction:	a system remote from the vehicle configured to transmit data or voice communications between various communication systems.
Honeywell's construction:	a network that communicates requests to the data source.
<b>Claim Language:</b>	
<p>1. A data communications system for retrieving data information, said data communications system comprising:</p> <p style="padding-left: 40px;">a data source comprising a <b><u>network system</u></b> for the storage and delivery of the data information;</p> <p style="padding-left: 40px;">an information request system comprising a transmission unit coupled to said data source and adapted to request the data information from said data source wherein said transmission unit comprises a satellite data unit and a radio frequency unit;</p> <p style="padding-left: 40px;">a first communication medium configured for transmission of requests for the data information from the information request system to said data source, said first communication medium comprising:</p> <p style="padding-left: 80px;">an aeronautical satellite system and a ground station, wherein said aeronautical satellite system is adapted to transmit data information requests from said satellite data unit to said ground station, said ground station being coupled to said <b><u>network system</u></b> to facilitate the transferring of said data information requests to said <b><u>network system</u></b>; and</p> <p style="padding-left: 40px;">a radio ground station adapted to receive information request signals from said radio frequency unit,</p> <p style="padding-left: 40px;">wherein said radio ground station is adapted to transmit data information requests from said radio frequency unit to said <b><u>network system</u></b>;</p> <p style="padding-left: 40px;">a second communication medium comprising a direct broadcast satellite adapted to receive data information from said data source and to broadcast said data information to said receiver;</p>	

a receiver coupled to said data source by said second communication medium and adapted to receive the data information requested by said information request system from said data source; and

wherein said information request system is configured to select one of said aeronautical satellite system and said radio ground station from said first communication medium for transmission of data information requests.

4. A method for providing and controlling data communications from a direct broadcast system to a passenger carrier, said method comprising the steps of . . .

. . . transmitting the data information requests from said ground station to said direct broadcast system through a **network system** . . .

10. A data communications system for retrieving data information, said data communications system comprising:

a data source comprising a **network system** for the storage and delivery of the data information;

an information request system comprising a transmission unit coupled to said data source and adapted to request the data information from said data source, wherein said transmission unit comprises a satellite data unit, a radio frequency unit, and a wireless LAN unit;

a first communication medium configured for transmission of requests for the data information from the information request system to said data source, said first communication medium comprising:

an aeronautical satellite system and a ground station, wherein said aeronautical satellite system is adapted to transmit data information requests from said satellite data unit to said ground station, said ground station being coupled to said **network system** to facilitate the transferring of said data information requests to said **network system**; and

a radio ground station adapted to receive information request signals from said radio frequency unit, wherein said radio ground station is adapted to transmit data information requests from said radio frequency unit to said **network system**; and

a LAN ground station adapted to receive information request signals from said wireless LAN unit, wherein said LAN ground station is adapted to transmit data information requests from said wireless LAN unit to said **network system**, and said **network system** is adapted to transfer information requests signals to said data source;

a second communication medium comprising a direct broadcast satellite adapted to receive data information from said data source and to broadcast



said data information to said receiver;

a receiver coupled to said data source by said second communication medium and adapted to receive the data information requested by said information request system from said data source; and

wherein said information request system is configured to select one of said aeronautical satellite system, said radio ground station and said LAN ground station from said first communication medium for transmission of data information requests.

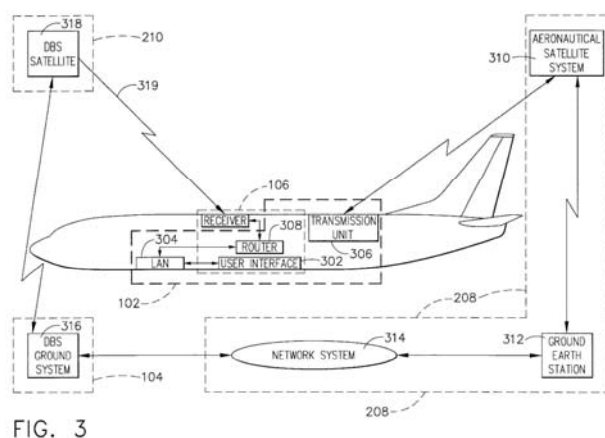
### Evidence:

"Network 314 preferably comprises a general network system configured to transmit data or voice communications between various communication systems . . . " (Ex. 6, 8:56-58).

"A data source comprising a network system for the storage and delivery of the data information . . . " (Ex. 6, 10:48-49, 12:48-49).

"Said radio ground station is adapted to transmit data information requests from said radio frequency unit to said network system." (Ex. 6, 13:1-3); *see also* claims 3 and 4; (emphasis added to all).

Figures 3 -5 of the '152 Patent:



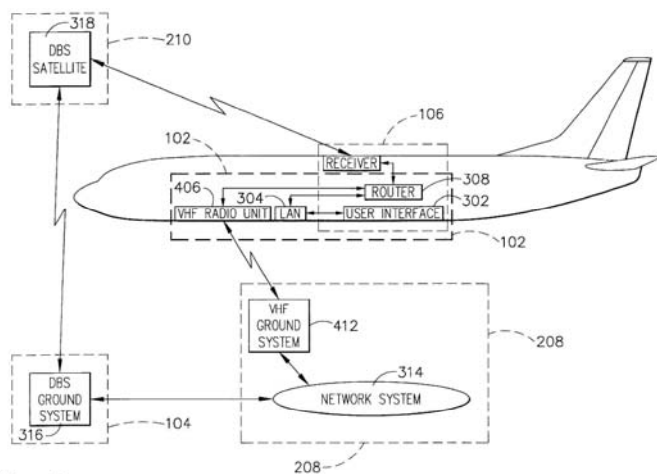


FIG. 4

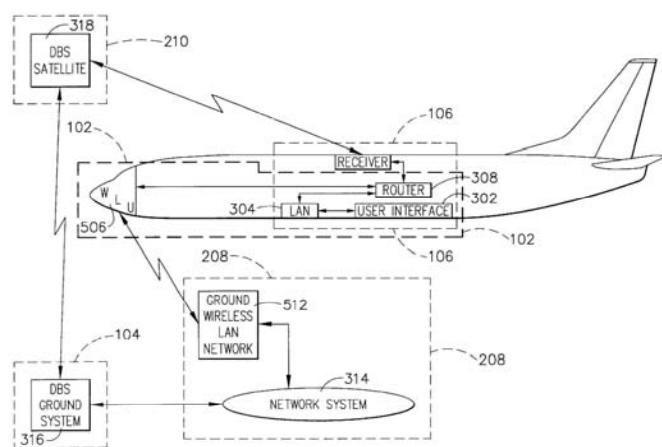


FIG. 5

<b>The '152 Patent</b>	
<b>Term:</b>	
3. <u>"Information request system": Claims 1, 4, and 10</u>	
<b>Proposed Construction:</b>	
Teledyne's construction:	a dedicated system configured to enable a system user to request information via the first communication medium from the data source.
Honeywell's construction:	a system configured to enable a system user to request information.
<b>Claim Language:</b>	
<p>1. A data communications system for retrieving data information, said data communications system comprising:</p> <p style="padding-left: 40px;">a data source comprising a network system for the storage and delivery of the data information;</p> <p style="padding-left: 40px;">an <b><u>information request system</u></b> comprising a transmission unit coupled to said data source and adapted to request the data information from said data source wherein said transmission unit comprises a satellite data unit and a radio frequency unit;</p> <p style="padding-left: 40px;">a first communication medium configured for transmission of requests for the data information from the <b><u>information request system</u></b> to said data source, said first communication medium comprising:</p> <p style="padding-left: 40px;">an aeronautical satellite system and a ground station, wherein said aeronautical satellite system is adapted to transmit data information requests from said satellite data unit to said ground station, said ground station being coupled to said network system to facilitate the transferring of said data information requests to said network system; and</p> <p style="padding-left: 40px;">a radio ground station adapted to receive information request signals from said radio frequency unit,</p> <p style="padding-left: 40px;">wherein said radio ground station is adapted to transmit data information requests from said radio frequency unit to said network system;</p> <p style="padding-left: 40px;">a second communication medium comprising a direct broadcast satellite adapted to receive data information from said data source and to broadcast said data information to said receiver;</p>	

a receiver coupled to said data source by said second communication medium and adapted to receive the data information requested by said **information request system** from said data source; and

wherein said **information request system** is configured to select one of said aeronautical satellite system and said radio ground station from said first communication medium for transmission of data information requests.

4. A method for providing and controlling data communications from a direct broadcast system to a passenger carrier, said method comprising the steps of:

transmitting data information requests from an **information request system** to a ground station, said transmitting of data information requests provided through one of satellite transmission signals and radio transmission signals by way of selection between one of a satellite data unit and a radio frequency unit;

transmitting the data information requests from said ground station to said direct broadcast system through a network system;

accessing data information corresponding to the data information request from said direct broadcast system;

transmitting the data information from said direct broad-cast system to a direct broadcast satellite; and

broadcasting the data information from said direct broad-cast satellite to a receiver provided onboard said passenger carrier.

10. A data communications system for retrieving data information, said data communications system comprising:

a data source comprising a network system for the storage and delivery of the data information;

an **information request system** comprising a transmission unit coupled to said data source and adapted to request the data information from said data source, wherein said transmission unit comprises a satellite data unit, a radio frequency unit, and a wireless LAN unit;

a first communication medium configured for transmission of requests for the data information from the **information request system** to said data source, said first communication medium comprising:

an aeronautical satellite system and a ground station, wherein said aeronautical satellite system is adapted to transmit data information requests from said satellite data unit to said ground station, said ground station being coupled to said network system to facilitate the transferring of said data information requests to said network system; and

a radio ground station adapted to receive information request signals

from said radio frequency unit, wherein said radio ground station is adapted to transmit data information requests from said radio frequency unit to said network system; and

a LAN ground station adapted to receive information request signals from said wireless LAN unit, wherein said LAN ground station is adapted to transmit data information requests from said wireless LAN unit to said network system, and said network system is adapted to transfer information requests signals to said data source;

a second communication medium comprising a direct broadcast satellite adapted to receive data information from said data source and to broadcast said data information to said receiver;

a receiver coupled to said data source by said second communication medium and adapted to receive the data information requested by said **information request system** from said data source; and

wherein said **information request system** is configured to select one of said aeronautical satellite system, said radio ground station and said LAN ground station from said first communication medium for transmission of data information requests.

#### **Evidence:**

"The information request system 102 is configured to enable a system user, . . . to request information from the data source 104 via the first communication medium 208." (Ex. 6, 5:32-35) (emphasis added).

"The data communications system may be carried out in one form by a data communications system having a data source, an information request system coupled to the data source . . ." (Ex. 6, abstract)

"A communications system according to various aspects of the present invention may comprise a data source, an information request system coupled to the data source . . ." (Ex. 6, 1:41-43) (emphasis added).

<b>The '152 Patent</b>	
<b>Term:</b>	
4. <u>"Transmission unit": Claims 1, 7 and 10</u>	
<b>Proposed Construction:</b>	
Teledyne's construction:	a unit on an aircraft that transmits a request for data to the data source via the first communication medium.
Honeywell's construction:	a component through which information requests to the data source are transmitted. In addition, the transmission unit may act as a receiver and receive signals from the data source.
<b>Claim Language:</b>	
<p>1. A data communications system for retrieving data information, said data communications system comprising:</p> <p style="padding-left: 40px;">a data source comprising a network system for the storage and delivery of the data information;</p> <p style="padding-left: 40px;">an information request system comprising a <b><u>transmission unit</u></b> coupled to said data source and adapted to request the data information from said data source wherein said <b><u>transmission unit</u></b> comprises a satellite data unit and a radio frequency unit . . .</p> <p>7.     A data communications system for a passenger carrier, said system comprising:</p> <p style="padding-left: 40px;">a <b><u>transmission unit</u></b> comprising a satellite data unit and a radio frequency unit, located on board said passenger carrier and operatively connected to a user interface, said <b><u>transmission unit</u></b> being configured to select one of said satellite data unit and said radio frequency unit for transmission of the information request signals, said satellite frequency unit configured for providing satellite transmission signals to an aeronautical satellite system, said aeronautical satellite system being adapted to provide the information request signals to said ground station, and said radio frequency unit for providing radio transmission signals to said ground station, wherein said ground station is adapted to receive the radio transmission signals and transmit said signals to said ground network;</p> <p style="padding-left: 40px;">a ground station for receiving information request signals from said</p>	

**transmission unit;**

a direct broadcast system for providing data information;  
 a ground network for linking said ground station and said direct broadcast system to facilitate communications;  
 a direct broadcast satellite, said direct broadcast satellite adapted to interface and communicate with said direct broadcast system; and  
 a receiver located onboard said passenger carrier and adapted to receive data signals broadcast from said direct broadcast satellite, said receiver being operatively connected to said user interface to facilitate the transmission of said data information from said direct broadcast system to passengers.

10. A data communications system for retrieving data information, said data communications system comprising:

a data source comprising a network system for the storage and delivery of the data information;

an information request system comprising a **transmission unit** coupled to said data source and adapted to request the data information from said data source, wherein said **transmission unit** comprises a satellite data unit, a radio frequency unit, and a wireless LAN unit . . .

**Evidence:**

"Information requests are transmitted to the data source 104 by the transmission unit 206 via first communication medium." (Ex. 6, 6:14-16).

Figures 2 -5 of the '152 Patent:

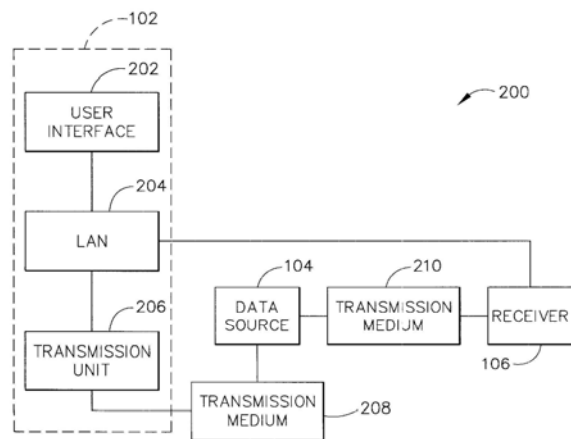


FIG. 2

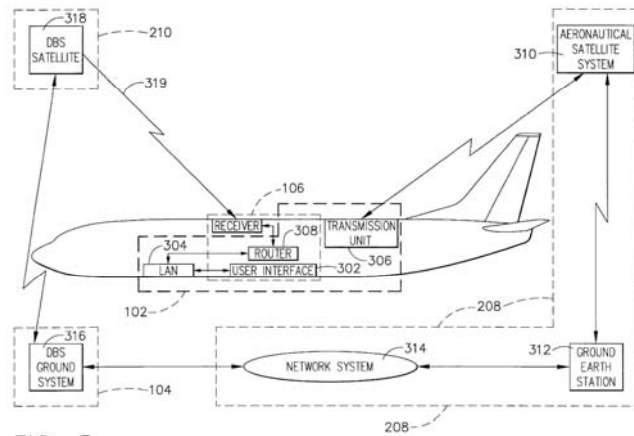


FIG. 3

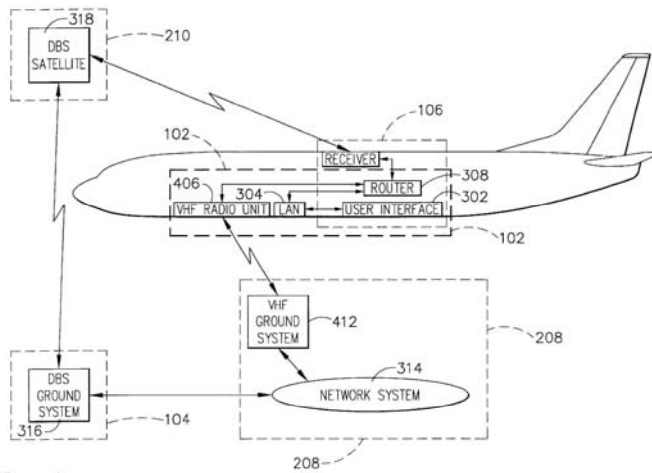


FIG. 4

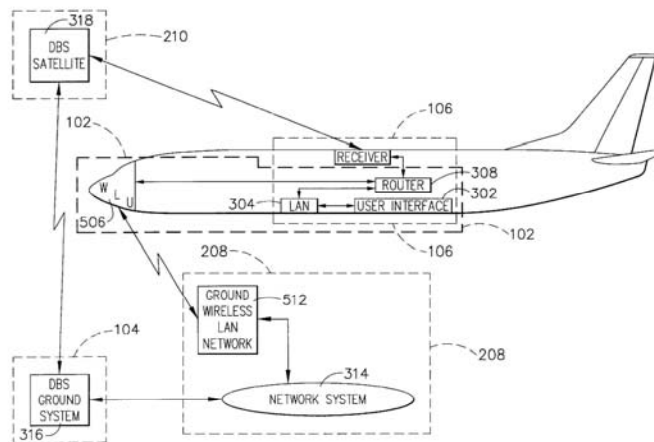


FIG. 5



<b>The '152 Patent</b>	
<b>Term:</b>	
5. <u>"Satellite data unit": Claims 1, 4, 5, 7, 8 and 10</u>	
<b>Proposed Construction:</b>	
Teledyne's construction:	satellite transmitter unit that receives a request from the information request system and generates a corresponding signal to be transmitted via satellite to the data source.
Honeywell's construction:	a communications unit that facilitates communications via satellite.
<b>Claim Language:</b>	
<p>1. A data communications system for retrieving data information, said data communications system comprising:</p> <p style="padding-left: 40px;">a data source comprising a network system for the storage and delivery of the data information;</p> <p style="padding-left: 40px;">an information request system comprising a transmission unit coupled to said data source and adapted to request the data information from said data source wherein said transmission unit comprises a <b><u>satellite data unit</u></b> and a radio frequency unit;</p> <p style="padding-left: 40px;">a first communication medium configured for transmission of requests for the data information from the information request system to said data source, said first communication medium comprising:</p> <p style="padding-left: 40px;">an aeronautical satellite system and a ground station, wherein said aeronautical satellite system is adapted to transmit data information requests from said <b><u>satellite data unit</u></b> to said ground station, said ground station being coupled to said network system to facilitate the transferring of said data information requests to said network system . . .</p> <p>4.     A method for providing and controlling data communications from a direct broadcast system to a passenger carrier, said method comprising the steps of:</p> <p style="padding-left: 40px;">transmitting data information requests from an information request system to a ground station, said transmitting of data information requests provided through one of satellite transmission signals and radio transmission signals by way</p>	

of selection between one of a **satellite data unit** and a radio frequency unit . . .

5. A method according to claim 4, wherein said step of transmitting data information requests from said information request system to said ground station comprises:

transmitting the data information requests from said **satellite data unit** to an aeronautical satellite system utilizing said satellite transmission signals; and

transmitting the data information requests from said aeronautical satellite system to said ground station using said satellite transmission signals.

7. A data communications system for a passenger carrier, said system comprising:

a transmission unit comprising a **satellite data unit** and a radio frequency unit, located on board said passenger carrier and operatively connected to a user interface, said transmission unit being configured to select one of said **satellite data unit** and said radio frequency unit for transmission of the information request signals, said satellite frequency unit configured for providing satellite transmission signals to an aeronautical satellite system, said aeronautical satellite system being adapted to provide the information request signals to said ground station, and said radio frequency unit for providing radio transmission signals to said ground station, wherein said ground station is adapted to receive the radio transmission signals and transmit said signals to said ground network . . .

8. A data communications system according to claim 7, wherein said transmission unit further comprises a wireless LAN unit, said transmission unit being configured to select one of said **satellite data unit**, said radio frequency unit and said wireless LAN unit for transmission of the information request signals.

10. A data communications system for retrieving data information, said data communications system comprising:

a data source comprising a network system for the storage and delivery of the data information;

an information request system comprising a transmission unit coupled to said data source and adapted to request the data information from said data source, wherein said transmission unit comprises a **satellite data unit**, a radio frequency unit, and a wireless LAN unit;

a first communication medium configured for transmission of requests for the data information from the information request system to said data source, said first communication medium comprising:

an aeronautical satellite system and a ground station, wherein said aeronautical satellite system is adapted to transmit data information requests from said **satellite data unit** to said ground station, said ground station being coupled to said network system to facilitate the transferring of said data information requests to said network system; and . . .

**Evidence:**

" . . . aeronautical satellite system is adapted to transmit data information requests from said satellite data unit to said ground station . . . " (Ex. 6, 10:60-62) (emphasis added).

" . . . transmitting of data information requests provided through one of satellite transmission signals and radio transmission signals by way of selection between one of satellite data unit and a radio frequency unit . . . " (Ex. 6, 11:35-39) (emphasis added).

" . . . transmitting the data information requests from said satellite data unit to an aeronautical satellite system . . . " (Ex. 6, 11:54-55).

" . . . said satellite frequency unit configured for providing satellite transmission signals to an aeronautical satellite system . . . " (Ex. 6, 12:8-11) (emphasis added).

"The SDU receives the request and generates a corresponding signal to be transmitted according to any suitable satellite communication technique." (Ex. 6, 6:67, 7:1-2).

Figure 8 of the '152 patent:

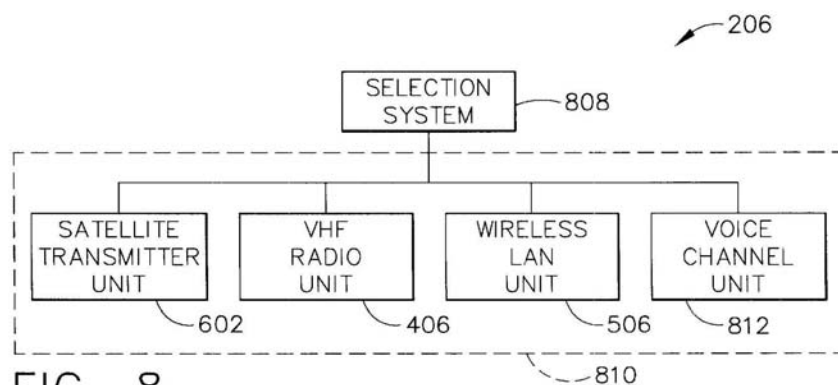


FIG. 8

<b>The '152 Patent</b>	
<b>Term:</b>	
6. <u>"Radio frequency unit": Claims 1, 4, 7, 8 and 10</u>	
<b>Proposed Construction:</b>	
Teledyne's construction:	a unit for providing conventional radio transmission signals to a ground station.
Honeywell's construction:	a radio frequency communications unit.
<b>Claim Language:</b>	
<p>1. A data communications system for retrieving data information, said data communications system comprising:</p> <p style="padding-left: 40px;">a data source comprising a network system for the storage and delivery of the data information;</p> <p style="padding-left: 40px;">an information request system comprising a transmission unit coupled to said data source and adapted to request the data information from said data source wherein said transmission unit comprises a satellite data unit and a <b><u>radio frequency unit</u></b>;</p> <p style="padding-left: 40px;">a first communication medium configured for transmission of requests for the data information from the information request system to said data source, said first communication medium comprising:</p> <p style="padding-left: 80px;">an aeronautical satellite system and a ground station, wherein said aeronautical satellite system is adapted to transmit data information requests from said satellite data unit to said ground station, said ground station being coupled to said network system to facilitate the transferring of said data information requests to said network system; and</p> <p style="padding-left: 40px;">a radio ground station adapted to receive information request signals from said <b><u>radio frequency unit</u></b>,</p> <p style="padding-left: 40px;">wherein said radio ground station is adapted to transmit data information requests from said <b><u>radio frequency unit</u></b> to said network system;</p> <p style="padding-left: 40px;">a second communication medium comprising a direct broadcast satellite adapted to receive data information from said data source and to broadcast said data information to said receiver;</p> <p style="padding-left: 40px;">a receiver coupled to said data source by said second communication medium and adapted to receive the data information requested by said information</p>	

request system from said data source; and

wherein said information request system is configured to select one of said aeronautical satellite system and said radio ground station from said first communication medium for transmission of data information requests.

4. A method for providing and controlling data communications from a direct broadcast system to a passenger carrier, said method comprising the steps of:

transmitting data information requests from an information request system to a ground station, said transmitting of data information requests provided through one of satellite transmission signals and radio transmission signals by way of selection between one of a satellite data unit and a **radio frequency unit** . . .

7. A data communications system for a passenger carrier, said system comprising:

a transmission unit comprising a satellite data unit and a **radio frequency unit**, located on board said passenger carrier and operatively connected to a user interface, said transmission unit being configured to select one of said satellite data unit and said **radio frequency unit** for transmission of the information request signals, said satellite frequency unit configured for providing satellite transmission signals to an aeronautical satellite system, said aeronautical satellite system being adapted to provide the information request signals to said ground station, and said **radio frequency unit** for providing radio transmission signals to said ground station, wherein said ground station is adapted to receive the radio transmission signals and transmit said signals to said ground network . . .

8. A data communications system according to claim 7, wherein said transmission unit further comprises a wireless LAN unit, said transmission unit being configured to select one of said satellite data unit, said **radio frequency unit** and said wireless LAN unit for transmission of the information request signals.

10. A data communications system for retrieving data information, said data communications system comprising:

a data source comprising a network system for the storage and delivery of the data information;

an information request system comprising a transmission unit coupled to said data source and adapted to request the data information from said data source, wherein said transmission unit comprises a satellite data unit, a **radio frequency unit**, and a wireless LAN unit;

a first communication medium configured for transmission of requests for the data information from the information request system to said data source, said first communication medium comprising:

an aeronautical satellite system and a ground station, wherein said aeronautical satellite system is adapted to transmit data information requests from said satellite data unit to said ground station, said ground station being coupled to said network system to facilitate the transferring of said data information requests to said network system; and

a radio ground station adapted to receive information request signals from said **radio frequency unit**, wherein said radio ground station is adapted to transmit data information requests from said **radio frequency unit** to said network system; and . . .

**Evidence:**

". . . a radio ground station adapted to receive request signals from said radio frequency unit . . ." (Ex. 6, 10:66-67, 12:66-67) (emphasis added).

". . . said radio frequency unit for providing radio transmission signals to said radio ground station . . ." (Ex. 6, 12:12-13) (emphasis added).

". . . said transmission unit being configured to select one of said satellite data unit, said radio frequency unit and said wireless LAN unit for transmission of the information request signals." (Ex. 6, 12:34-37) (emphasis added).

"Accordingly, the receiver 106 may be compatible with any appropriate communication medium, including radio, wireless LAN communications, satellite communications, or any other medium." (Ex. 6, 4:1-4).

". . . the transmission unit 206 suitably comprises a selection system 808 and multiple transmission mechanisms 810, such as a satellite transmitter unit 602, a VHF radio unit 406, wireless LAN unit 506, and/or voice channel unit 812." (Ex. 6, 6:29-32).

". . . configured to facilitate transfer of information . . . via satellite communications, radio communications, wireless cellular communications or direct cable communications and/or the like." (Ex. 6, 3:29-33).

". . . the transmission mechanisms include various transmitters and transceivers

used in the conventional operation of the aircraft, such as a satellite data unit, a radio frequency unit, and a wireless LAN unit." (Ex. 6, 6:58-61).

<b>The '152 Patent</b>	
<b>Term:</b>	
7. <u>"First communication medium": 1 and 10</u>	
<b>Proposed Construction:</b>	
Teledyne's construction:	<p><i>For claim 1:</i> a manner of communication defined in the third element of claim 1 (sub-paragraphs one and two) that is different from the second communication medium.</p> <p><i>For claim 10:</i> a manner of communication defined in the third element of claim 10 (sub-paragraphs one to three) that is different from the second communication medium.</p>
Honeywell's construction:	Any suitable media or combination of media for transmitting data requests from transmission unit to the data source.
<b>Claim Language:</b>	
<p>1. A data communications system for retrieving data information, said data communications system comprising:</p> <p style="padding-left: 40px;">a data source comprising a network system for the storage and delivery of the data information;</p> <p style="padding-left: 40px;">an information request system comprising a transmission unit coupled to said data source and adapted to request the data information from said data source wherein said transmission unit comprises a satellite data unit and a radio frequency unit;</p> <p style="padding-left: 40px;">a <b><u>first communication medium</u></b> configured for transmission of requests for the data information from the information request system to said data source, said <b><u>first communication medium</u></b> comprising:</p> <p style="padding-left: 40px;">an aeronautical satellite system and a ground station, wherein said aeronautical satellite system is adapted to transmit data information requests from said satellite data unit to said ground station, said ground station being coupled to said network system to facilitate the transferring of said data information requests to said network system; and</p> <p style="padding-left: 40px;">a radio ground station adapted to receive information request signals</p>	



from said radio frequency unit,

wherein said radio ground station is adapted to transmit data information requests from said radio frequency unit to said network system;

a second communication medium comprising a direct broadcast satellite adapted to receive data information from said data source and to broadcast said data information to said receiver;

a receiver coupled to said data source by said second communication medium and adapted to receive the data information requested by said information request system from said data source; and

wherein said information request system is configured to select one of said aeronautical satellite system and said radio ground station from said **first communication medium** for transmission of data information requests.

10. A data communications system for retrieving data information, said data communications system comprising:

a data source comprising a network system for the storage and delivery of the data information;

an information request system comprising a transmission unit coupled to said data source and adapted to request the data information from said data source, wherein said transmission unit comprises a satellite data unit, a radio frequency unit, and a wireless LAN unit;

a **first communication medium** configured for transmission of requests for the data information from the information request system to said data source, said **first communication medium** comprising . . .

. . . wherein said information request system is configured to select one of said aeronautical satellite system, said radio ground station and said LAN ground station from said **first communication medium** for transmission of data information requests.

#### **Evidence:**

" . . . **first communication medium** comprising: an aeronautical satellite system and a ground station . . . and a radio ground station. . ." (Ex. 6, 10:59-66).

"Similarly, the receiver is coupled to the data source via any appropriate and available medium, such as a satellite link, and is suitably different from the medium coupling the information request system to the data source." (Ex. 6, 1:54-58) (emphasis added).

"The information request system 102 is suitably coupled to the data source 104 via a first communication medium 208, and the receiver 106 is suitably coupled to the data source 104 via a second communication medium 210 . . . " (Ex. 6, 2:41-45).

" . . . a system user may request data information from a data source 104 through information request system 102 and first communication medium 208. . . [D]ata source 104 may retrieve the requested data and transmit the data to receiver 106 through second communication medium 210." (Ex. 6, 10:22-27) (emphasis added).

". . . a first communication medium having both an aeronautical satellite system and a radio ground station, [and] a second communication medium comprising a direct broadcast satellite . . ." (Ex. 8, Response to Office Action, May 13, 2002, pp. 10, 17) (emphasis added).

"The following is an examiner's statement of reasons for allowance: the prior art made of record does not teach or fairly suggest in combination a data communication system for retrieving data information . . . comprising: . . . a first communication medium for transmission of requests for data . . . a second communication medium . . ." ((Ex. 9, Reasons for Allowance, p. 2) (emphasis added).

<b>The '152 Patent</b>	
<b>Term:</b>	
8. <u>"Aeronautical satellite system": Claims 1 and 10</u>	
<b>Proposed Construction:</b>	
Teledyne's construction:	At least one satellite that is not a direct broadcast satellite, which is configured to receive data request signals from a transmission unit and forward or transmit the signals to a ground earth station.
Honeywell's construction:	At least one satellite configured to receive data request signals from the transmission unit and forward or transmit the signals to a ground earth station.
<p><b>Claim Language:</b></p> <p>1. A data communications system for retrieving data information, said data communications system comprising:</p> <p style="padding-left: 40px;">a data source comprising a network system for the storage and delivery of the data information;</p> <p style="padding-left: 40px;">an information request system comprising a transmission unit coupled to said data source and adapted to request the data information from said data source wherein said transmission unit comprises a satellite data unit and a radio frequency unit;</p> <p style="padding-left: 40px;">a first communication medium configured for transmission of requests for the data information from the information request system to said data source, said first communication medium comprising:</p> <p style="padding-left: 80px;">an <b><u>aeronautical satellite system</u></b> and a ground station, wherein said <b><u>aeronautical satellite system</u></b> is adapted to transmit data information requests from said satellite data unit to said ground station, said ground station being coupled to said network system to facilitate the transferring of said data information requests to said network system; and</p> <p style="padding-left: 40px;">a radio ground station adapted to receive information request signals from said radio frequency unit,</p> <p style="padding-left: 40px;">wherein said radio ground station is adapted to transmit data information requests from said radio frequency unit to said network system;</p> <p style="padding-left: 40px;">a second communication medium comprising a direct broadcast satellite adapted to receive data information from said data source and to broadcast</p>	

said data information to said receiver;

a receiver coupled to said data source by said second communication medium and adapted to receive the data information requested by said information request system from said data source; and

wherein said information request system is configured to select one of said **aeronautical satellite system** and said radio ground station from said first communication medium for transmission of data information requests.

10. A data communications system for retrieving data information, said data communications system comprising . . .

a first communication medium configured for transmission of requests for the data information from the information request system to said data source, said first communication medium comprising:

an **aeronautical satellite system** and a ground station, wherein said **aeronautical satellite system** is adapted to transmit data information requests from said satellite data unit to said ground station, said ground station being coupled to said network system to facilitate the transferring of said data information requests to said network system; and . . .

. . . wherein said information request system is configured to select one of said **aeronautical satellite system**, said radio ground station and said LAN ground station from said first communication medium for transmission of data information requests.

#### **Evidence:**

"Preferably, satellite system 310 comprises an array of satellites strategically orbiting the world, such as the Inmarsat Aeronautical Satellite Communications System . . ." (Ex. 6, 8:29-31).

" . . . a second communication medium comprising a direct broadcast satellite . . ." (Ex. 6, 11:4-5).

"The following is an examiner's statement of reasons for allowance: the prior art made of record does not teach or fairly suggest in combination a data communication system for retrieving data information . . . comprising: . . . a first communication medium . . ., said first communication medium comprising: an aeronautical satellite system and a ground station, . . . a second communication medium comprising a direct broadcast satellite . . ." (Ex. 9, Reasons for

Allowance, p. 2).

Figure 3 of '152 Patent:

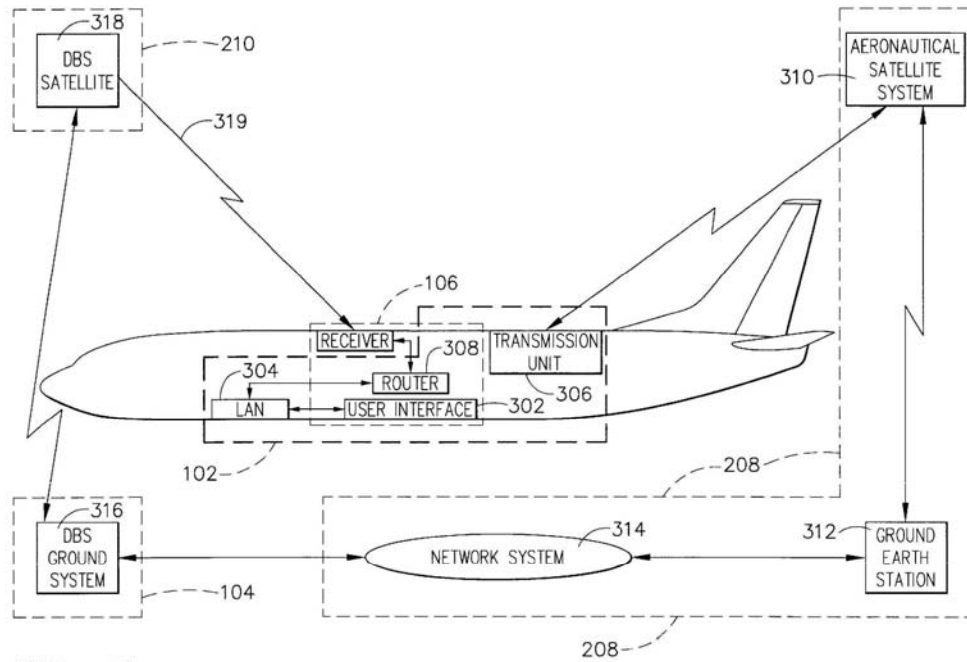


FIG. 3

<b>The '152 Patent</b>	
<b>Term:</b>	
9. <u>"Second communication medium": Claims 1 and 10</u>	
<b>Proposed Construction:</b>	
Teledyne's construction:	a method of communication defined in the fourth element of claim 1 that is different from the first communication medium.
Honeywell's construction:	any medium, plurality or combination of media capable of transmitting information from the data source to the receiver. The first and second communication media may be the same or different media, or separate channels of the same medium.
<b>Claim Language:</b>	
<p>1. A data communications system for retrieving data information, said data communications system comprising:</p> <p style="padding-left: 40px;">a data source comprising a network system for the storage and delivery of the data information;</p> <p style="padding-left: 40px;">an information request system comprising a transmission unit coupled to said data source and adapted to request the data information from said data source wherein said transmission unit comprises a satellite data unit and a radio frequency unit;</p> <p style="padding-left: 40px;">a first communication medium configured for transmission of requests for the data information from the information request system to said data source, said first communication medium comprising:</p> <p style="padding-left: 80px;">an aeronautical satellite system and a ground station, wherein said aeronautical satellite system is adapted to transmit data information requests from said satellite data unit to said ground station, said ground station being coupled to said network system to facilitate the transferring of said data information requests to said network system; and</p> <p style="padding-left: 40px;">a radio ground station adapted to receive information request signals from said radio frequency unit,</p> <p style="padding-left: 80px;">wherein said radio ground station is adapted to transmit data information requests from said radio frequency unit to said network system;</p>	

a **second communication medium** comprising a direct broadcast satellite adapted to receive data information from said data source and to broadcast said data information to said receiver;

a receiver coupled to said data source by said **second communication medium** and adapted to receive the data information requested by said information request system from said data source; and

wherein said information request system is configured to select one of said aeronautical satellite system and said radio ground station from said first communication medium for transmission of data information requests.

10. A data communications system for retrieving data information, said data communications system comprising . . .

. . . a **second communication medium** comprising a direct broadcast satellite adapted to receive data information from said data source and to broadcast said data information to said receiver;

a receiver coupled to said data source by said **second communication medium** and adapted to receive the data information requested by said information request system from said data source; and

wherein said information request system is configured to select one of said aeronautical satellite system, said radio ground station and said LAN ground station from said first communication medium for transmission of data information requests.

#### **Evidence:**

" . . . first communication medium comprising: an aeronautical satellite system and a ground station . . . and a radio ground station. . ." (Ex. 6, 10:59-66).

"Similarly, the receiver is coupled to the data source via any appropriate and available medium, such as a satellite link, and is suitably different from the medium coupling the information request system to the data source." (Ex. 6, 1:54-58) (emphasis added).

"The information request system 102 is suitably coupled to the data source 104 via a first communication medium 208, and the receiver 106 is suitably coupled to the data source 104 via a second communication medium 210 . . ." (Ex. 6, 2:41-45).

" . . . a system user may request data information from a data source 104 through

information request system 102 and first communication medium 208. . .[D]ata source 104 may retrieve the requested data and transmit the data to receiver 106 through second communication medium 210." (Ex. 6, 10:22-27) (emphasis added).

". . . a first communication medium having both an aeronautical satellite system and a radio ground station, [and] a second communication medium comprising a direct broadcast satellite . . ." (Ex. 8, Response to Office Action, May 13, 2002, pp. 10, 17) (emphasis added).

"The following is an examiner's statement of reasons for allowance: the prior art made of record does not teach or fairly suggest in combination a data communication system for retrieving data information . . . comprising: . . . a first communication medium for transmission of requests for data . . . a second communication medium . . ." ((Ex. 9, Reasons for Allowance, p. 2) (emphasis added).



<b>The '152 Patent</b>	
<b>Term:</b>	
10. <u>"Direct broadcast satellite": Claims 1 and 10; "Broadcasting": Claim 4</u>	
<b>Proposed Construction:</b>	
"Direct broadcast satellite"	<b>Teledyne's construction:</b> a satellite that is not an aeronautical satellite, which broadcasts the same transmissions directly to all end-users and cannot receive transmissions from end-users.
	<b>Honeywell's construction:</b> a satellite that facilitates access to greater bandwidth than reliance solely on the telephone system and affords relatively high data transfer rates from the data source to the receiver.
"Broadcasting"	<b>Teledyne's construction:</b> requires no construction, but plain meaning is "sending the same transmissions to all."
	<b>Honeywell's construction:</b> transmitting.
<b>Claim Language:</b>	
<p>1. A data communications system for retrieving data information, said data communications system comprising:</p> <p style="padding-left: 40px;">a data source comprising a network system for the storage and delivery of the data information;</p> <p style="padding-left: 40px;">an information request system comprising a transmission unit coupled to said data source and adapted to request the data information from said data source wherein said transmission unit comprises a satellite data unit and a radio frequency unit;</p> <p style="padding-left: 40px;">a first communication medium configured for transmission of requests for the data information from the information request system to said data source, said first communication medium comprising:</p> <p style="padding-left: 80px;">an aeronautical satellite system and a ground station, wherein said aeronautical satellite system is adapted to transmit data information requests from said satellite data unit to said ground station, said ground station being coupled to said network system to facilitate the transferring of said data information requests to said network system; and</p>	

a radio ground station adapted to receive information request signals from said radio frequency unit,  
 wherein said radio ground station is adapted to transmit data information requests from said radio frequency unit to said network system;  
 a second communication medium comprising a **direct broadcast satellite** adapted to receive data information from said data source and to broadcast said data information to said receiver;  
 a receiver coupled to said data source by said second communication medium and adapted to receive the data information requested by said information request system from said data source; and  
 wherein said information request system is configured to select one of said aeronautical satellite system and said radio ground station from said first communication medium for transmission of data information requests.

4. A method for providing and controlling data communications from a direct broadcast system to a passenger carrier, said method comprising the steps of:

transmitting data information requests from an information request system to a ground station, said transmitting of data information requests provided through one of satellite transmission signals and radio transmission signals by way of selection between one of a satellite data unit and a radio frequency unit;

transmitting the data information requests from said ground station to said direct broadcast system through a network system;

accessing data information corresponding to the data information request from said direct broadcast system;

transmitting the data information from said direct broad-cast system to a direct broadcast satellite; and

**broadcasting** the data information from said direct broad-cast satellite to a receiver provided onboard said passenger carrier.

10. A data communications system for retrieving data information, said data communications system comprising . . .

. . . a second communication medium comprising a **direct broadcast satellite** adapted to receive data information from said data source and to broadcast said data information to said receiver. . .

**Evidence:**

" . . . a second communication medium comprising a direct broadcast satellite . . . " (Ex. 6, 11:4-5).

"The following is an examiner's statement of reasons for allowance: the prior art made of record does not teach or fairly suggest in combination a data communication system for retrieving data information . . . comprising: . . . a first communication medium . . ., said first communication medium comprising: an aeronautical satellite system and a ground station, . . . a second communication medium comprising a direct broadcast satellite . . ." (Ex. 9, Reasons for Allowance, p. 2).

"DirecPC downloads content from the Internet directly from the server to our satellite network and straight into the back of your PC." (Ex. 10, <http://www.directpc.com/about/a36f.html>, p. 1).

"EchoStar's digital broadcast is the first Direct Broadcast Satellite (DBS) service to link directly to subscriber PCs . . . " (Ex. 11, <http://dishnetwork.com/satserv/data/dataintro.htm>, p. 1).

"DirecPC receives a Usenet Newsgroup feed from the Internet, which allows Turbo Newscast to automatically broadcast thousands of newsgroups over the DirecPC satellite system." (Ex. 10, [www.directpc.com/about/a36f.html](http://www.directpc.com/about/a36f.html), p. 2).

The "aeronautical satellite system" is "adapted to transmit data information requests," whereas the "direct broadcast satellite" is adapted "to broadcast said data information to said receiver." (Ex. 6, 10:60-61, 11:6-7) (emphasis added).

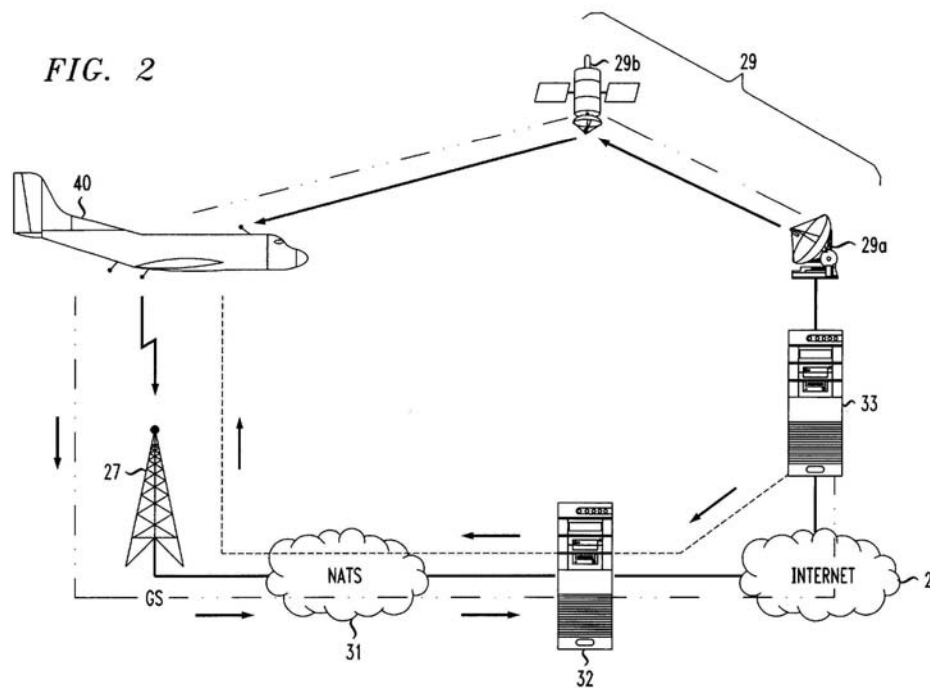
" . . . broadcasting the data information from said direct broadcast satellite to a receiver . . . " (Ex. 6, 11:47-48) (emphasis added).

" . . . adapted to receive data signals broadcast from said direct broadcast satellite . . . " (Ex. 6, 12:26-27) (emphasis added).

" . . . such as the broadcast signals from DBS satellite 318." (Ex. 6, 4:46-47) (emphasis added).

" . . . broadband satellite systems, such as the Geo-synchronous Earth Orbit (GEO) Digital Broadcast Satellite (DBS), are envisioned as providing a one-way data service as the primary service. . . " U.S. Patent. No. 6,201,797 (Leuca, *et al.*, Mar. 13, 2001) (Ex. 12, 4:49-52, 5:57-58).

Figure 2 of U.S. Patent. No. 6,201,797 (Leuca, *et al.*, Mar. 13, 2001).



<b>The '152 Patent</b>	
<b>Term:</b>	
11. <u>"Selecting": Claim 6</u>	
<b>Proposed Construction:</b>	
Teledyne's construction:	Selecting is done by the information request system.
Honeywell's construction:	Choosing.
<b>Claim Language:</b>	
<p>6.     A method according to claim 4, wherein said step of transmitting data information requests from said information request system to said ground station comprises:</p> <p style="padding-left: 40px;"><u><b>selecting</b></u> one of a group of transmission mediums comprising an aeronautical satellite system, a radio frequency system, a wireless LAN system and a voice channel system for transmission of the data information requests.</p>	
<b>Evidence:</b>	
<p>"Accordingly, the information request system 102 may select an appropriate transmission mechanism 510 for submitting requests to the data source . . ."</p> <p>(Ex. 6, 10:13-15).</p>	

<b>The '152 Patent</b>	
<b>Term:</b>	
12. The "Systems" ("Radio Frequency System"; "Wireless LAN System"; "Voice Channel System") of Claim 6	
<b>Proposed Construction:</b>	
"Radio Frequency System": Claim 6	<b>Teledyne's construction:</b> Teledyne believes this claim phrase is indefinite. To the extent the Court is inclined to construe this phrase, a possible construction is "a radio frequency unit and at least one ground station configured to receive radio transmissions."
	<b>Honeywell's construction:</b> Honeywell believes this claim phrase does not require construction, but if the Court is inclined to construe the phrase its plain meaning is "a radio frequency communications system."
"Wireless LAN System": Claim 6	<b>Teledyne's construction:</b> Teledyne believes this claim phrase is indefinite. To the extent the Court is inclined to construe this phrase, a possible construction is "a wireless LAN unit with at least one ground station configured to receive transmissions."
	<b>Honeywell's construction:</b> Honeywell believes this claim phrase does not require construction, but if the Court is inclined to construe the phrase its plain meaning is "a ground-based wireless LAN and network system that can transmit request signals to the data source."
"Voice Channel System": Claim 6	<b>Teledyne's construction:</b> Teledyne believes this claim phrase is indefinite. To the extent the Court is inclined to construe this phrase, a possible construction is "a voice channel unit, voice communication protocol and a ground station configured to receive voice channel communications."
	<b>Honeywell's construction:</b> Honeywell believes this claim phrase does not require construction, but if the Court is inclined to construe the phrase, its plain meaning is "a system configured to receive voice channel communications."

**Claim Language:**

6. A method according to claim 4, wherein said step of transmitting data information requests from said information request system to said ground station comprises:

selecting one of a group of transmission mediums comprising an aeronautical satellite system, a **radio frequency system**, a **wireless LAN system** and a **voice channel system** for transmission of the data information requests.

**Evidence:**

<b>The '468 Patent</b>	
<b>Term:</b>	
1. <u>"System Server": Claims 1, 2, 7, 9, 12, 13 and 15</u>	
<b>Proposed Construction:</b>	
Teledyne's construction:	A remote hardware storage device that obtains and stores data updates and sends data updates to a vehicle server via a data connection.
Honeywell's construction:	A device or computer system or software that includes an administrative application/program, a database and an interface application.
<b>Claim Language:</b>	
<p>1.     A method of providing a data update to a vehicle, the method comprising the steps of:</p> <p style="padding-left: 40px;">obtaining and storing said data update at a <b><u>system server</u></b>; forwarding said data update from said <b><u>system server</u></b> to a vehicle server via a data connection;</p> <p style="padding-left: 40px;">loading said data update from said vehicle server into a component at said vehicle; and</p> <p style="padding-left: 40px;">verifying from said vehicle server to said <b><u>system server</u></b> via said data connection that said loading step completed successfully.</p> <p>9.     A method of providing a data update to a vehicle, the method comprising the steps of:</p> <p style="padding-left: 40px;">receiving said data update at a <b><u>system server</u></b>;</p> <p style="padding-left: 40px;">transmitting said data update to a vehicle server via a data connection at a pre-determined time; and</p> <p style="padding-left: 40px;">receiving a confirmation from said vehicle server via said data connection when said data update is successfully loaded.</p>	
<b>Evidence:</b>	
<p>". . . obtaining and storing said data update at a system server; forwarding said data update from said system server to a vehicle server via a data connection . . . "</p> <p>(Ex. 13, 10:38-40).</p>	



Figure 1 of the '468 patent:

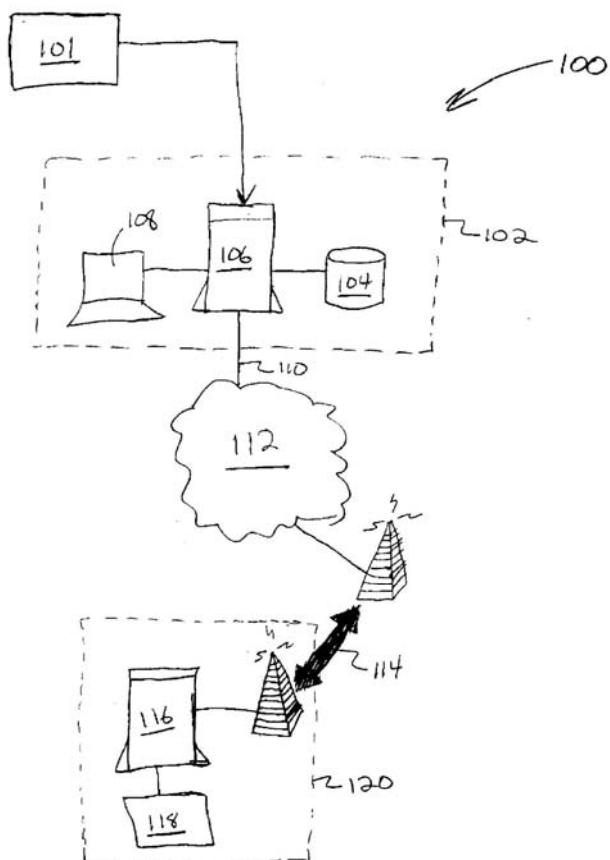


FIGURE 1

<b>The '468 Patent</b>	
<b>Term:</b> 2. <u>"Vehicle Server": Claims 1, 2, 7, 9, 12, 13 and 15</u>	
<b>Proposed Construction:</b>	
Teledyne's construction:	A hardware storage device for use in a vehicle that is capable of receiving data updates from the system server and loading the data updates in a component that is separate from the vehicle server.
Honeywell's construction:	Any hardware or software device that is capable of receiving data updates from the system server and loading the updates in a component.
<b>Claim Language:</b>  1.     A method of providing a data update to a vehicle, the method comprising the steps of: obtaining and storing said data update at a system server; forwarding said data update from said system server to a <b><u>vehicle server</u></b> via a data connection; loading said data update from said <b><u>vehicle server</u></b> into a component at said vehicle; and verifying from said <b><u>vehicle server</u></b> to said system server via said data connection that said loading step completed successfully.  9.     A method of providing a data update to a vehicle, the method comprising the steps of: receiving said data update at a system server; transmitting said data update to a <b><u>vehicle server</u></b> via a data connection at a pre-determined time; and receiving a confirmation from said <b><u>vehicle server</u></b> via said data connection when said data update is successfully loaded.	
<b>Evidence:</b>	

"... loading said data update from said vehicle server into a component at said vehicle. ..." (Ex. 13, 10:41-42) (emphasis added).

"... vehicle server 116 is any hardware or software device that is capable of receiving data updates from system server 102 and loading the updates in component 118." (Ex. 13, 5:18-22)

"[t]he vehicle server 116 described therein is a central node through which terminals are able to communicate with avionics systems [separate components]." (Ex. 13, 5:29-31).

Insert Figure 1 from 468:

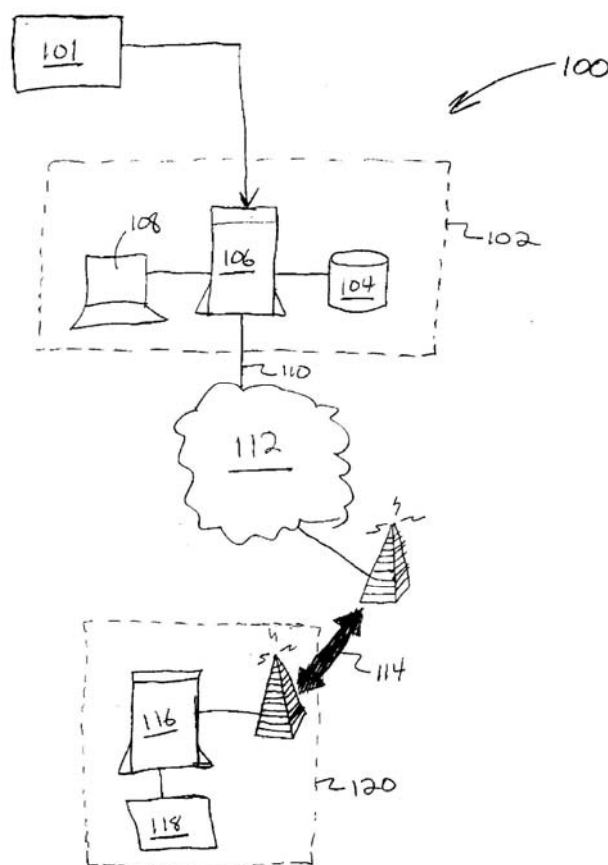


FIGURE 1

<b>The '468 Patent</b>	
<b>Term:</b>	
3. <u>"Data Connection": Claims 1, 2, 7, 9, 12, 13 and 15</u>	
<b>Proposed Construction:</b>	
Teledyne's construction:	A digital communication medium for transferring data updates.
Honeywell's construction:	Any type of wireless, optical or electrical data connection.
<b>Claim Language:</b>	
<p>1.     A method of providing a data update to a vehicle, the method comprising the steps of:</p> <p style="padding-left: 40px;">obtaining and storing said data update at a system server; forwarding said data update from said system server to a vehicle server via a <b><u>data connection</u></b>;</p> <p style="padding-left: 40px;">loading said data update from said vehicle server into a component at said vehicle; and</p> <p style="padding-left: 40px;">verifying from said vehicle server to said system server via said <b><u>data connection</u></b> that said loading step completed successfully.</p>	
<p>2.     The method of claim 1 wherein said <b><u>data connection</u></b> comprises a wireless <b><u>data connection</u></b>.</p>	
<p>9.     A method of providing a data update to a vehicle, the method comprising the steps of:</p> <p style="padding-left: 40px;">receiving said data update at a system server;</p> <p style="padding-left: 40px;">transmitting said data update to a vehicle server via a <b><u>data connection</u></b> at a pre-determined time; and</p> <p style="padding-left: 40px;">receiving a confirmation from said vehicle server via said <b><u>data connection</u></b> when said data update is successfully loaded.</p>	
<p>12.    The method of claim 9 wherein said <b><u>data connection</u></b> comprises a wireless <b><u>data connection</u></b>.</p>	

**Evidence:**

<b>The '468 Patent</b>	
<b>Term:</b> 4. <u>"Component": Claims 1, 2 and 7</u>	
<b>Proposed Construction:</b>	
Teledyne's construction:	A vehicle hardware device that is separate from the vehicle server and that receives data updates from the vehicle server and uses the data updates to perform a function.
Honeywell's construction:	Any avionics or other aircraft device such as a flight management computer, flight management system, global positioning system, navigation computer or the like.
<b>Claim Language:</b> 1.     A method of providing a data update to a vehicle, the method comprising the steps of: obtaining and storing said data update at a system server; forwarding said data update from said system server to a vehicle server via a data connection; loading said data update from said vehicle server into a <b><u>component</u></b> at said vehicle; and verifying from said vehicle server to said system server via said data connection that said loading step completed successfully.	
<b>Evidence:</b>  ". . . vehicle server 116 is any hardware or software device that is capable of receiving data updates from system server 102 and loading the updates in component 118." (Ex. 13, 5:18-22)  "[t]he vehicle server 116 described therein is a central node through which terminals are able to communicate with avionics systems [separate components]." (Ex. 13, 5:29-31).  ". . . component 118 suitably uses data upgrades from data source 101 to perform	

a function." (Ex. 13, 5:45-54).

Figure 1 of the '468

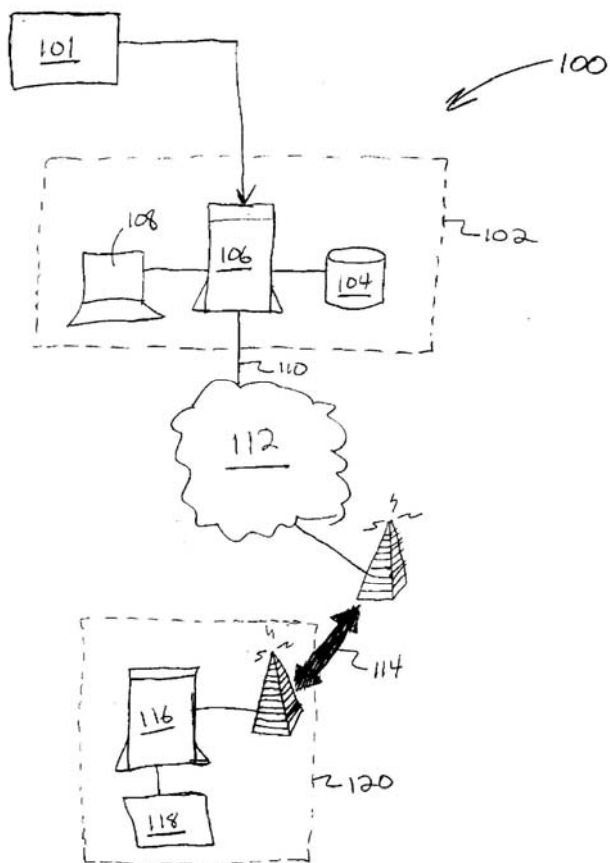


FIGURE 1

<b>The '468 Patent</b>	
<b>Term:</b> 5. <u>"Loading," "Verifying" and "Receiving" Steps</u>	
<b>Proposed Construction:</b>	
"Loading Said Data Update From Said Vehicle Server Into A Component At Said Vehicle": Claims 1, 2 and 7	<b>Teledyne's construction:</b> A vehicle server extracts, processes, and saves a data update in a component for further processing and use by the component.
	<b>Honeywell's construction:</b> Loading the data update from the vehicle server into the vehicle component.
"Verifying From Said Vehicle Server To Said System Server Via Said Data Connection That Said Loading Step Completed Successfully": Claims 1, 2 and 7	<b>Teledyne's construction:</b> After the data update is loaded into the appropriate component, the vehicle server determines whether the load was successful and sends the result of this check to the system server via the same data connection used to transmit the data update to the vehicle server in the second element of claim 1.
	<b>Honeywell's construction:</b> Transmitting a signal from the vehicle server to the system server via a data connection indicating that the loading step completed successfully.
"Receiving A Confirmation From Said Vehicle Server Via Said Data Connection When Said Data Update Is Successfully Loaded": Claims 9, 12, 13 and 15	<b>Teledyne's construction:</b> After the data update is loaded into the appropriate component, the vehicle server determines whether the load was successful and sends the result of this check to the system server via the same data connection used to transmit the data update to the vehicle server in the second element of claim 9.
	<b>Honeywell's construction:</b> Receiving a signal from the vehicle server to the system server via the data connection indicating that the loading step completed successfully.
<b>Claim Language:</b> 1.     A method of providing a data update to a vehicle, the method comprising the steps of:	



obtaining and storing said data update at a system server; forwarding said data update from said system server to a vehicle server via a data connection; **loading said data update from said vehicle server into a component at said vehicle;** and **verifying from said vehicle server to said system server via said data connection that said loading step completed successfully.**

9. A method of providing a data update to a vehicle, the method comprising the steps of:  
 receiving said data update at a system server;  
 transmitting said data update to a vehicle server via a data connection at a pre-determined time; and  
**receiving a confirmation from said vehicle server via said data connection when said data update is successfully loaded.**

#### **Evidence:**

"Loading" occurs "[a]fter the data update is provided to vehicle server 116, [when] the relevant data is extracted, processed, and loaded into component 116 (step 214)." (Ex. 13, 6:36-38).

". . . component 118 suitably uses data upgrades from data source 101 to perform a function." (Ex. 13, 5:52-54).

". . . verifying from said vehicle server to said system server via said data connection . . ." (Ex. 13, 10:43-44) (emphasis added).

". . . after data is loaded into the relevant component 118, vehicle server 116 may process a "check status" operation with component 118 to determine whether the load was successful. . . " (Ex. 13, 6:47-55).

". . . the aircraft servers sends a verification message to the system server to indicate success or failure of the load operation." (Ex. 13, 2:23-25).

**The '468 Patent****Term:**

6. "Digital Storage Medium": Claims 7, 13 and 15

**Proposed Construction:**

Teledyne's construction:

A remote hardware device on which computer-executable instructions can be stored.

Honeywell's construction:

A medium that can store digital information.

**Claim Language:****Evidence:**

". . . obtaining and storing said data update at a system server; forwarding said data update from said system server to a vehicle server via a data connection . . . "  
(Ex. 13, 10:38-40).

Figure 1 of the '468 patent:

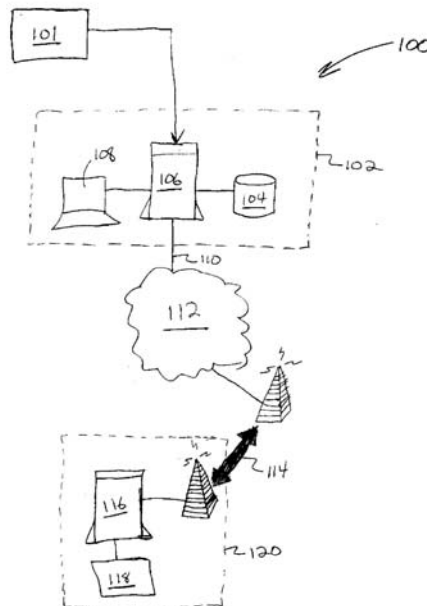


FIGURE 1

<b>The '468 Patent</b>	
<b>Term:</b>	
7. <u>"Operable To Execute The Method": Claims 7, 13 and 15</u>	
<b>Proposed Construction:</b>	
Teledyne's construction:	Must execute each step of the method.
Honeywell's construction:	Able to cause one or more applications, processes, processors or devices to perform the steps.
<b>Claim Language:</b>	
<p>7.     A digital storage medium having computer-executable instructions stored thereon, wherein said computer-executable instructions are <b><u>operable to execute the method</u></b> of claim 2.</p> <p>13.    A digital storage medium having computer-executable instructions stored thereon, wherein said computer-executable instructions are <b><u>operable to execute the method</u></b> of claim 9.</p> <p>14.    A digital storage medium having computer-executable instructions stored thereon, wherein said computer-executable instructions are <b><u>operable to execute the method</u></b> of claim 11.</p>	
<b>Evidence:</b>	

<b>The '468 Patent</b>	
<b>Term:</b>	
8. <u>"At A Pre-Determined Time": Claims 9, 12, 13 and 15</u>	
<b>Proposed Construction:</b>	
Teledyne's construction:	Scheduled in advance.
Honeywell's construction:	At a time that is determined in advance, or that is determined by a program in accordance with pre-determined rules based on user inputs and/or data in a database.
<b>Claim Language:</b>	
<p>9.     A method of providing a data update to a vehicle, the method comprising the steps of:</p> <p>          receiving said data update at a system server;</p> <p>          transmitting said data update to a vehicle server via a data connection <b><u>at a pre-determined time</u></b>; and</p> <p>          receiving a confirmation from said vehicle server via said data connection when said data update is successfully loaded.</p>	
<b>Evidence:</b>	